empowering communities

powering our future

Essential Energy
Annual Report 2018-19

About
This Report

Essential Energy's Annual Report details financial, operational, and safety performance for the 2018-19 financial year and has been approved by our Board of Directors.

The contents of this report comply with:

- The *State Owned Corporations Act 1989*; and
- The *Annual Reports (Statutory Bodies) Act 1984*.

Assurance

The financial statements contained within this document have been audited by the Audit Office of New South Wales. The Independent Auditor's certified report is on page 48.

Cost for report production

The external cost to produce this report was $21,514 excluding GST.

General Manager Strategy, Regulation and Corporate Affairs
Essential Energy PO Box 5730
Port Macquarie NSW 2444

Email: info@essentialenergy.com.au
ABN: 37 428 185 226

31 October 2019

The Hon. Dominic Perrottet MP
Treasurer
Member for Epping
GPO Box 5341
SYDNEY NSW 2001

The Hon. Damien Tudehope MLC
Minister for Finance and Small Business
GPO Box 5341
SYDNEY NSW 2001

Dear Ministers

SUBMISSION OF ANNUAL REPORT FOR THE FINANCIAL YEAR ENDED 30 JUNE 2019

We are pleased to submit Essential Energy's annual report outlining financial, operational, and safety performance for the year ended 30 June 2019.

This report has been prepared in accordance with the *Annual Reports (Statutory Bodies) Act 1984* and is submitted for tabling in the New South Wales Parliament.

A copy will be sent to the Premier of New South Wales, the Auditor-General, the Minister for Energy and Environment, the Minister for Water, Property and Housing, and other significant stakeholders.

Once tabled, the report will be made available on our website – essentialenergy.com.au.

Yours sincerely,

Robyn Clubb
Interim Chair

John Cleland
Chief Executive Officer

From the **Chair**

Robyn Clubb
Interim Chair

The Australian energy market is transforming rapidly, presenting customers with more options on how they obtain and consume electricity. As we look to the future, it is the responsibility of distribution networks to balance ongoing commitments to efficiently deliver electricity safely and reliably with their increasingly complex and emerging role as an active facilitator of domestic and grid-scale renewable energy.

essential communities

Essential Energy is embracing this transformation, with a vision built around empowering communities to use and share energy for a better tomorrow. The business is engaging with customers to gain insights into their needs and expectations, implementing new technologies, and embarking on a transformation program to safely deliver the efficiencies required to maintain downward pressure on electricity prices for customers.

While the highest priority must always be safety, customers are also making it clear that all parts of the energy supply chain need to be helping to drive down electricity costs, while maintaining reliable supply. These factors were top of mind in late 2018 when Essential Energy developed its 2019-24 Regulatory Proposal and submitted it to the Australian Energy Regulator (AER). It was pleasing to see the AER acknowledge Essential Energy's commitment to customers and the comprehensive work undertaken to understand customer priorities. The resulting AER determination, which largely accepted Essential Energy's proposal, positions Essential Energy to deliver local, enduring and responsive electricity services – while managing safety, affordability, reliability, service, innovation and shareholder returns.

Since FY2012-13, Essential Energy's distribution network charges have decreased in real terms by 40 per cent, with the aim of decreasing by a further eight per cent by FY2023-24. By delivering these savings Essential Energy is playing its role as an economic enabler for families, businesses and organisations across regional, rural and remote New South Wales and parts of southern Queensland.

Driving such change is important and challenging work, requiring an ambitious vision alongside a strong commitment to do things better. To this end, Essential Energy has commenced a whole-of-business transformation program that will position the organisation to continue to provide safe and reliable electricity to regional, rural and remote communities at a sustainable cost in an increasingly decarbonised, distributed and digitally enabled energy market.

An important element of the transformation involves consideration of how Essential Energy's workforce is equipped to meet future demands on the network. As with most industries, investments in technology and more efficient processes will lead to changes in both the size and shape of the workforce and different labour force requirements. In August 2019, the NSW Government announced its intention to issue a formal Direction to Essential Energy to limit job losses within its service territory. In complying with the Direction, Essential Energy continues to work through the financial and operational implications for the organisation, including the transformation. Essential Energy remains committed to working with the NSW Government on the implementation of the Direction.

In the Far West of New South Wales, Essential Energy's operating division Essential Water provides a secure water supply to Broken Hill and surrounding communities. Essential Water's pricing proposal, approved by the Independent Pricing and Regulatory Tribunal (IPART) in May 2019, provides for real price decreases for most customers through to June 2022. Customer input was again vital to this proposal, with a tailored stakeholder engagement program highlighting reliability of water supply and affordability as the two most important factors for residential customers.

Essential Energy's social role in regional, rural and remote communities is also important, as it seeks to build an inclusive and diverse workforce reflective of the communities it serves, where people can bring their whole selves to work. These efforts are making a difference. More than two-thirds of the 2019 apprentices identify with at least one diversity group, including ten females and ten Indigenous men and women. For AccessAbility Day 2018, Essential Energy hosted 27 people with a disability across its network – the highest number of participants for a regional organisation anywhere in Australia. Such advancements will continue to make Essential Energy an even better place to work, for all people no matter their background, and will underpin ongoing improvements to business performance.

I thank each of Essential Energy's employees for their continued commitment to providing regional, rural and remote communities with safe and reliable products and services, at sustainable costs, and for actively engaging with the changing energy market.

Robyn Clubb
Interim Chair

From the **CEO**

Energy, at its core, is a fundamental enabler of economic activity, powering our homes and businesses, our health care facilities and schools. As one of Australia's largest electricity distribution networks, Essential Energy plays an integral role in the economy of regional, rural and remote New South Wales – a region that represents 40 per cent of the state's population. Our footprint stretches across 737,000 square kilometres, with 855,000 customers in locations as diverse as Broken Hill, Byron Bay and Bega.

John Cleland
Chief Executive Officer

Across Australia and around the globe, the energy sector faces a dynamic environment of increasingly decentralised systems, greater customer choice and shifting trends in energy consumption. The traditional supply chain running from centralised energy generation, across the transmission and distribution systems, to end-use consumers, is being challenged, placing the energy sector in the midst of a transformation that will fundamentally change how customers and energy providers interact.

In this environment, energy companies must keep seeking to understand customers' evolving needs and preferences. Essential Energy's industry-leading approach to customer engagement was recognised in November 2018 when Essential Energy won the 2018 Energy Consumers Australia and Energy Networks Australia Consumer Engagement Award, for our extensive consultation with consumer groups, customers, regulators and other audiences to develop our 2019-24 Regulatory Proposal.

The Australian Energy Regulator (AER), in its 30 April 2019 Final Determination on Essential Energy's 2019-24 Regulatory Proposal, acknowledged our comprehensive work to sustainably reduce operating costs, while improving safety performance and customer service. Our distribution network charges have decreased in real terms by 40 per cent since FY2012-13 and are forecast to decrease by a further eight per cent by FY2023-24. As a result, a typical residential customer paid $462 less (in real terms) for annual distribution network charges in FY2018-19, with a further $56 reduction forecast by FY2023-24.

Limiting network charge increases for one of the world's most geographically-dispersed electricity networks is a step in the right direction, but with low customer density (4.6 customers for every kilometre of powerline) we must continue to focus on having the right people, systems, processes and data to help us perform the right tasks at the right time. This requires a stringent, risk-based approach to investment across the network, and a focus on leveraging the benefits of new technology.

To this end, Essential Energy has commenced a five-year whole-of-business transformation program, to deliver the efficiencies required to be a sustainable distribution network business in the changing energy market. Improvements delivered by the program during FY2018-19 include: introduction of a new Customer Interaction Management System, leading to open claims and complaints reducing by more than 50 per cent; improvements to fleet management capabilities, to ensure our mobile assets are available when needed; and roll-out of mobile-friendly software to enable all employees to manage their expenses and travel claims more efficiently. We are also continuing to investigate new technologies, including stand-alone power systems, network visibility innovations and drone technologies, for improved network maintenance, reliability, safety and customer service.

In January 2019, we further delivered on our vision of empowering communities to share and use energy for a better tomorrow when we became a founding signatory to the Energy Charter, a world-first industry initiative open to all businesses across the gas and electricity supply chain. The Charter's primary purpose is to progress the business solutions and culture required to deliver a more affordable, sustainable and reliable energy system for all Australians. As an active participant in the Energy Charter, Essential Energy is playing a leading role in uniting the energy supply chain behind a common purpose of putting customers at the centre of the energy system.

In FY2018-19, teams across our network delivered works programs on time and on budget. More efficient operations, increased productivity and effective use of resources meant that compared to FY2017-18, we completed 500 more planned outages, to maintain network reliability, and fixed 3,000 more unplanned outages, with only a two per cent increase in labour costs.

Over the course of the year the network was impacted by events that challenged our employees and systems. Extreme weather conditions, such as the severe storms in the northern parts of our network in late December 2018, saw our employees delivering exceptional service, responding safely and quickly to restore power to impacted customers during an important and busy time of the year.

empowering communities

The average total duration for a customer being without supply in FY2018-19 was 237 minutes, above our target of 213 minutes. The reliability of supply of Essential Energy's network is approximately 20 per cent better than ten years ago. Our employees' outstanding work throughout the year and in all conditions across our geographically diverse network, meant our customer satisfaction remained high at 85 per cent, above our target of 84 per cent.

With 105 Total Recordable Injuries (TRIs), our safety performance in FY2018-19 was not good enough; however, this number was an improvement on FY2017-18, when we had 136 TRIs. We must continue to drive improvements in safety performance. With this in mind, a new Health, Safety and Environment strategy has been developed with a focus on empowering all employees to be safety leaders, with everyone making safety their own through appropriate actions, attention to diligence and caring for each other.

In FY2018-19, network revenue was $1,287.7M, an $18.9M increase on FY2017-18, which at 1.5 per cent was below inflation. After-tax profit was $2.8M, and return on capital employed was 4.3 per cent, which was 0.2 per cent below target due to investment in transformation to deliver longer term improvements and efficiencies.

Essential Water, our operating division that provides a secure water supply to 18,000 people in Broken Hill, Sunset Strip, Menindee and Silverton in Far West NSW, continued to serve these communities in the midst of severe drought. Importantly, the Murray River to Broken Hill pipeline project and Essential Water's associated investment were completed in February 2019, providing a secure and adequate water supply for generations to come, along with water security to support development. Essential Water operates and maintains the final pumping station for the pipeline, employing 500kVA of solar power to offset the energy costs of water transfer to Broken Hill during the day. Work to ensure a satisfactory long-term supply of water for customers serviced from the Menindee water treatment plant is ongoing.

Throughout FY2018-19, we continued to drive for greater inclusion and diversity to ensure our workforce is genuinely representative of the communities we serve. Our Apprenticeship Program is an important part of this, with our statistics for female and Aboriginal and Torres Strait Islander groups considerably above the NSW and Commonwealth averages for the type of apprenticeships we deliver. Eighteen per cent of our 102 apprentices are female and 26 per cent have an Aboriginal or Torres Strait Islander background. The program is also bringing younger people into the organisation, with almost half the 2019 apprentices under 21.

To our customers, communities and committed employees, I offer my thanks for your ongoing support as we continue the important work of empowering our communities and powering our future.

John Cleland
Chief Executive Officer

In 2018-19 Residential customers paid

$462

less for annual distribution network charges than in 2012-13

Reliability of supply, approximately

20%

better than ten years ago

Empowering our Communities
Powering our Future

About us

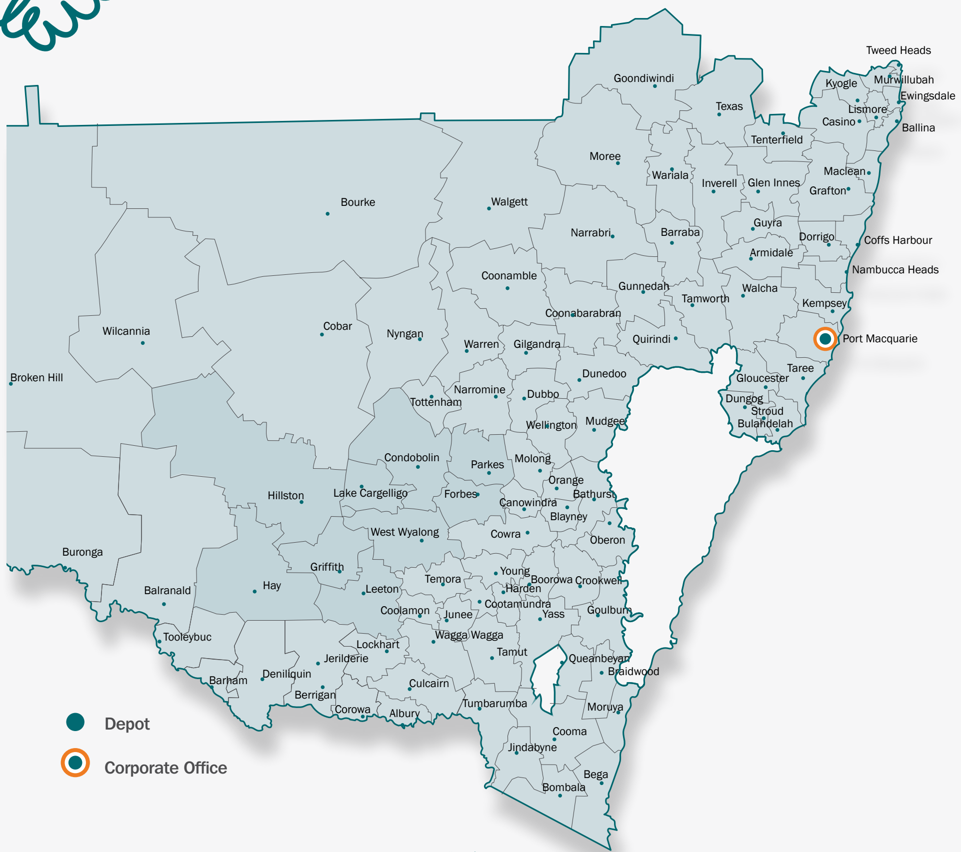
Essential Energy builds, operates and maintains the electricity network across 95 per cent of NSW and parts of southern Queensland. With more than 855,000 customers – including homes, hospitals, schools, businesses and community services – and 183,612 km of powerline, traversing 737,000 square kilometres of landmass, Essential Energy is an economic enabler for regional, rural and remote communities.

Essential Energy aims to continuously improve safety performance for employees, contractors and the community, along with the reliability, security and cost efficiency of the network, while striving to maintain downward pressure on the network component of customers' electricity bills.

Essential Energy's business objectives are:

- continuous improvements in safety culture and performance
- operate at industry best practice for efficiency, delivering best value for customers
- deliver real reductions in customers' distribution network charges
- deliver a satisfactory Return on Capital Employed.

In the far west of NSW, an operating division, Essential Water, services a population of approximately 18,000 people in the communities of Broken Hill, Sunset Strip, Menindee and Silverton. It delivers a secure water supply to around 10,500 customers and reliable sewerage services to around 9,700 customers in Broken Hill through a network of dams, water treatment plants, sewage treatment plants, reservoirs, water and sewage pumping stations, mains, and other related infrastructure.



>855,000
customers

1,500
powerlines, with 10 that are longer than 1,000km

95%
of NSW & parts of southern Queensland

737,000
square kilometres of regional, rural and remote NSW and parts of southern Queensland

370
zone substations and 140,000 distribution substations

183,612km
of overhead powerlines – equivalent to driving around Australia 13 times

1,905km
length of our longest powerline – services 335 customers

4.6 customers
per km of powerline – the lowest customer density in the National Electricity Market

36 years
average age of network assets

163,417kms
of powerlines in designated bushfire zones

3,000
employees

102
apprentices with 32 appointed in 2018-19

40M kms
travelled by employees in Essential Energy fleet vehicles each year

1.3M
Power poles – equating to 1.6 power poles per customer

Serving regional Australia

Our core business is operating and maintaining one of Australia's largest electricity networks – across a network footprint that is environmentally and geographically diverse. It includes sub-tropical areas in northern NSW, the alpine highlands of the Snowy Mountains and arid conditions in western NSW.

The geographic spread of our network and demographics of the communities we serve sets Essential Energy apart from other electricity distributors. Essential Energy has about one third the number of customers per kilometre of powerline compared to the average customer density across the National Electricity Market.

A distribution network with a low customer density requires more poles and wires to reach customers than other networks with a higher customer density. This significantly impacts the cost to serve our customers. Relatively sparsely populated networks also provide significant challenges for achieving reliability and service quality targets. However, the reliability of supply of Essential Energy's network has continued to improve, with performance in FY2018-19 approximately 20 per cent better than ten years ago.

Empowering our Communities

Powering our Future – continued

An industry responding to changing customer needs

The electricity industry is undergoing significant change, driven largely by customer demands for lower prices, alternative technologies, and greater control of how electricity is consumed. Many changes will be driven by the pace and types of innovation, making them difficult to plan for, particularly when decisions on network investment can be long lived. Essential Energy is committed to engaging with our customers, retailers, energy service providers and policy makers to help shape our future network business.

We are an active participant in these and other developments while continuing to respond to changing demands for our traditional network services and working towards operating and capital expenditure reductions that lead to further downward pressure on network charges. Underpinning all of this, Essential Energy's business vision is to empower communities to share and use energy for a better tomorrow.

Delivering reliability, affordability and safety to our customers

Essential Energy is transforming to deliver better value to customers. This is improving all aspects of our operations and the way we think about balancing risk and expenditure. We have already seen significant sustainable reductions in our operating expenditure and capital expenditure, whilst also ensuring our obligations in inspection, maintenance and vegetation management have been met. Our 2019-24 Regulatory Proposal reflects the outcomes of our customer consultation process, locking in these efficiency gains for the long-term benefit of customers.

Customer-centred vision, purpose and values

Maintaining focus on Essential Energy's vision, purpose, and values amidst widespread change is an important objective. Our employees are committed to all three and reflect them in how they behave every day. We listen to and respect our customers, safely deliver on our promises, and place our customers at the centre of everything we do.

Our Vision, Purpose and Values

empowering

Our Vision

What we want to be

Empowering communities to share and use energy for a better tomorrow.

Our Purpose

What we stand for

To enable energy solutions that improve life.

Business Objectives

- Continuous improvements in safety culture and performance
- Operate at industry best practice for efficiency, delivering best value for customers
- Deliver real reductions in customers' distribution network charges
- Deliver a satisfactory Return on Capital Employed

Our Values

What we care about

- Make safety your own
- Be easy to do business with
- Make every dollar count
- Be courageous, shape the future
- Be inclusive, supportive and honest

SNAPSHOT OF THE EVOLVING ENERGY INDUSTRY

TARIFF REFORM	ENVIRONMENTAL POLICY	EVOLVING REGULATORY ENVIRONMENT
GOVERNMENT POLICY CHANGES	INCREASED CUSTOMER CHOICE	POWER OF CHOICE
ELECTRIC VEHICLES	SMART METERS	INTERNET OF THINGS
SOLAR / PV	BATTERIES / STORAGE	RING FENCING
DECARBONISATION	INCREASED COMMUNITY INTEREST	BIG DATA

PEER TO PEER TRADING

MICRO-GRIDS

STAND-ALONE POWER SYSTEMS

LARGE SCALE RENEWABLES

NETWORK CHARGE CONSIDERATIONS

Scale and number of assets built over time

- Scale of network
- Working with a network built over time
- Number and age of assets

Largely regional and rural network

- 40 million kms travelled by our employees each year
- 10 powerline sections >1,000km long

Low population density

- Low customer density
- High cost to serve

Extreme environments

- 15,409 lightning strikes per year on the network
- Extreme variations in both weather and terrain
- Vegetation management

Our **Year**

Measure	FY2018-19 Target	FY2018-19 Actual	FY2019-20 Target
Lost Time Injury Frequency Rate (LTIFR)	3.2	3.8	2.8
Total Recordable Injury Frequency Rate (TRIFR)	17.4	17.6	15.0
Serious Claim Frequency Rate (SCFR)	4.1	2.5	2.0

Safety

'Make safety your own' is one of Essential Energy's five values. Safety is central to Essential Energy's business culture, as it is essential that every employee and contractor returns home to their family and loved ones injury free each day regardless of their duties or location.

There is still much work to do in improving safety performance and our safety journey continues as we research and implement programs to improve safety outcomes. We have developed a new Health, Safety and Environment strategy, to drive safety performance improvements by equipping all employees to be safety leaders, through their actions, safety diligence and care for each other. Public safety within the communities we serve is also an ongoing priority for Essential Energy.

Essential Energy's safety principles are to:

- acknowledge our important role in our communities' safety – listening to and respecting our customers – sharing knowledge and experience to keep them safe around our network
- look to our employees, contractors and communities as a valued source of insight
- value innovation and expertise – working together to deliver safe and reliable services
- care about health and safety at home, at work and at play – employee programs focus on building a proactive health and safety culture and a positive approach to mental health.

Affordability

Along with safety, customers continue to rank affordability and reliability as their top priorities. Essential Energy remains focussed on minimising network charges without compromising safety, reliability or service.

In FY2018-19, the annual Distribution Use of System (DUOS) cost for a typical residential customer using 5 MWh was $688, and $2,931 for a business customer using 23 MWh – both more than 40 per cent lower in real terms than the equivalent charges in FY2012-13. The AER's Final Determination on Essential Energy's 2019-24 Regulatory Proposal included reductions in capital and operating expenses, which will lead to a further eight per cent reduction in distribution charges (in real terms) by FY2023-24.

Our stakeholder engagement process, in support of the 2019-24 Regulatory Proposal, highlighted that many customers do not understand the company's role in the electricity supply chain. During the consultation, customer understanding of Essential Energy's role improved and there was a significant uplift in the perception of distribution charges being good value for money.

Annual distribution network charges

40%

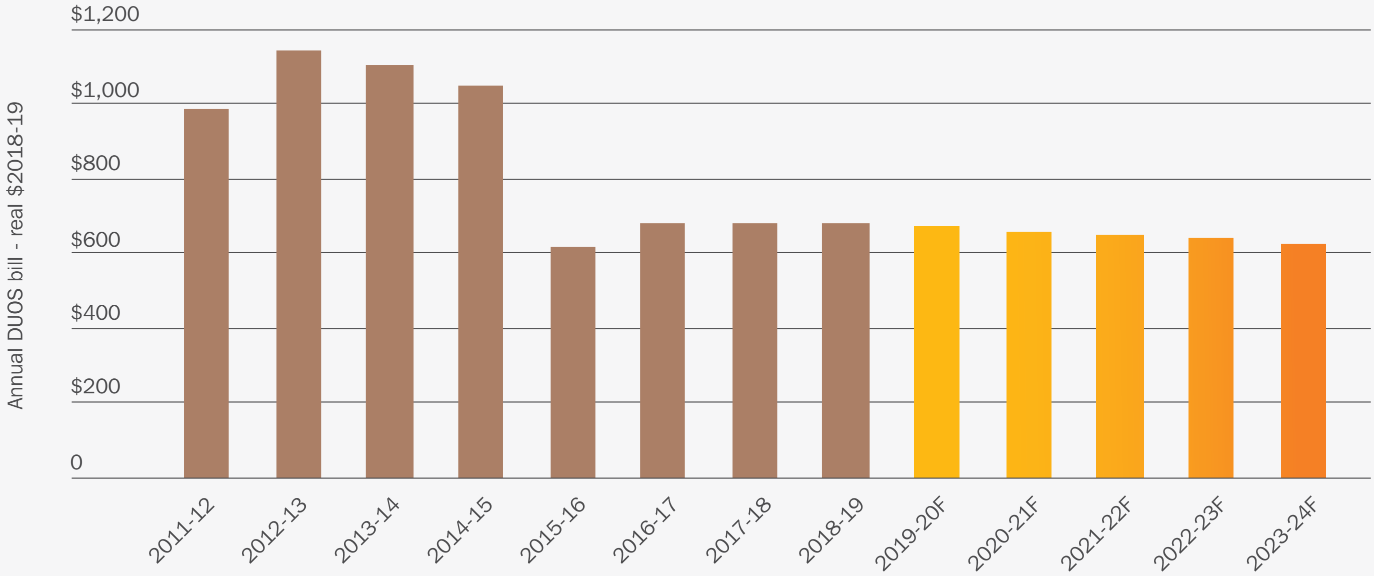
Lower in 2018-19 than in 2012-13

Forecast to be

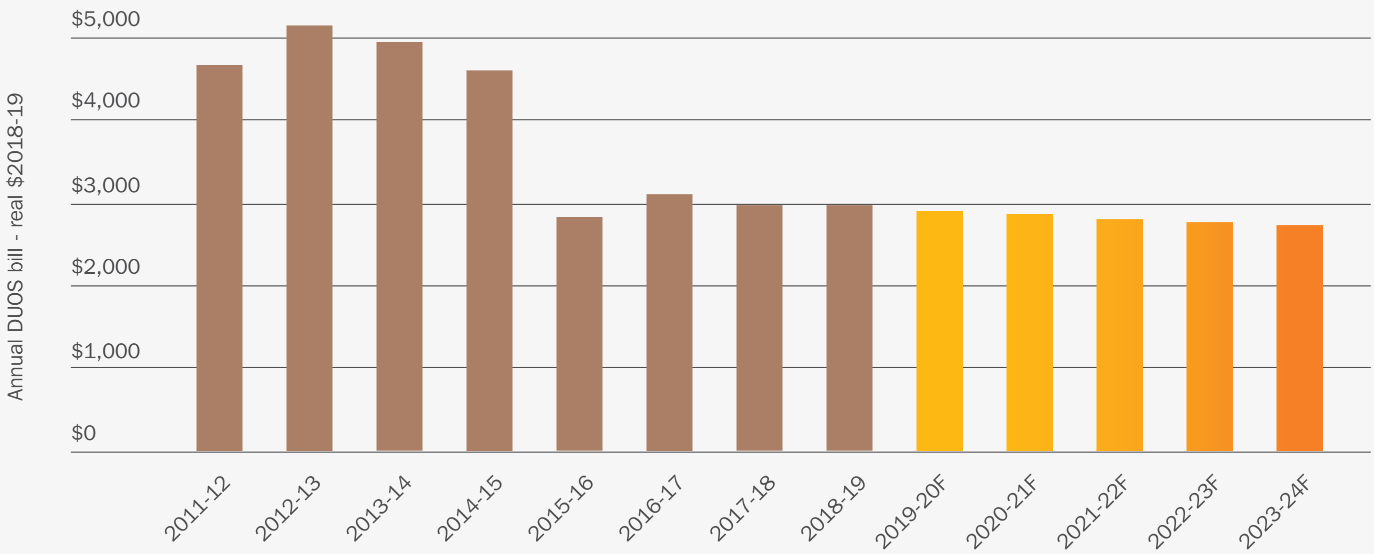
8%

Lower again by 2023-24

TYPICAL ANNUAL DISTRIBUTION USE OF SYSTEM COST (DUOS) FOR RESIDENTIAL CUSTOMERS USING 5MWH PER ANNUM



TYPICAL ANNUAL DISTRIBUTION USE OF SYSTEM COST (DUOS) FOR SMALL BUSINESS CUSTOMERS USING 23MWH PER ANNUM



Reliability

The performance and reliability of Essential Energy's electricity network is measured by the number and duration of supply interruptions. The System Average Interruption Duration Index (SAIDI) measures how long outages last, using the average total minutes a customer is without power in a year. The System Average Interruption Frequency Index (SAIFI) measures how many outages occur, using the average number of interruptions per customer for the year.

Essential Energy's outage duration (SAIDI) performance for FY2018-19 was 237 minutes and the interruption frequency (SAIFI) was 1.87 interruptions per customer. While favourable to the long-term historic trends for network performance, these results compare unfavourably to the Service Target Performance Incentive Scheme (STPIS) targets of 213 minutes and 1.82 respectfully. However, the reliability of Essential Energy's network is still approximately 20 per cent better than ten years ago.

Essential Energy experienced seven Major Event Days – when storms and bushfires caused major disruptions to our distribution network – during FY2018-19. This is above the average experienced over the last five years and was the result of several severe storm events in December and January, in which Essential Energy's crews worked tirelessly to restore supply over the Christmas period.

Key contributors to the management of long-term network reliability throughout FY2018-19 were targeted network investment and regular vegetation management around powerlines. The programs that deliver these are designed to balance affordability, community expectations, cultural and environmental considerations and safety requirements.

AER determination

Essential Energy's business is regulated by the Australian Energy Regulator (AER) under the National Electricity Rules (NER). This means that the AER regulates the revenue that can be received by Essential Energy for most of its distribution business – and also approves the pricing structures.

Essential Energy's expenditure proposal for the next five-year regulatory period (2019-24) was approved by the AER on 30 April 2019. The AER's final decision largely accepted Essential Energy's revised proposal and was consistent with the draft decision.

The AER was satisfied that Essential Energy's proposal reflected not only the considerable efficiency gains that have been achieved over the 2014-19 regulatory period, but also incorporated the necessary strategies and initiatives to deliver further efficiencies and improvements in productivity over the 2019-24 period.

The regulatory proposal demonstrates the company's vision, purpose and values and was heavily guided by feedback from customers and stakeholders over the past two and a half years. Customers told Essential Energy:

- safety is imperative
- they are satisfied with Essential Energy's current levels of power supply reliability
- Essential Energy's services must remain affordable.

Essential Energy aims to reduce its contribution to customer bills by prudently investing in innovative and enabling technologies to deliver ongoing business efficiencies and meet current and future customer needs.

Essential Energy's approved operating expenditure of $1,718.4M is 3.9 per cent lower than the 2014-19 regulatory period, along with an 11.5 per cent reduction in capital expenditure to $2,081.2M. Total revenue for the 2019-24 regulatory period is $5,079.3M (nominal, smoothed), on a forecast closing regulatory asset base of $9,675.1M (nominal) by 30 June 2024. Alongside investment in new and enabling technologies, this will continue to maintain downward pressure on annual network charges.

The AER commended Essential Energy for its efficiency gains, with network expenditure at some of the lowest levels in 20 years and acknowledged the business' significant engagement with customers throughout the development of the proposal.

Essential Water pricing and 2019-22 revenue determination

The Independent Pricing and Regulatory Tribunal (IPART) sets and regulates Essential Water's prices for a determined regulatory period (usually four years) to ensure prices are fair for customers while allowing the business to recover costs and generate an adequate return on assets.

During FY2018-19, a pipeline and related infrastructure was built from Wentworth to Broken Hill, securing a long-term water supply for the region. The pipeline is owned and operated by WaterNSW and transportation costs are charged to Essential Water for use of the infrastructure.

The NSW Government has committed (for four years from 2019) to ensuring that prices for end-use customers do not rise in real terms as the result of the new pipeline.

In July 2018, Essential Water lodged its pricing proposal with IPART for water and sewerage services covering a four-year period from 1 July 2019 to 30 June 2023.

This proposal was shaped through a tailored stakeholder engagement program that highlighted reliability of water supply and affordability as the two most important factors for residential customers. Following extensive review and consultation with Essential Water, community groups and business, IPART released its Determination on 30 May 2019.

The pricing covers a three-year period to 30 June 2022, due to the increased uncertainty of forecasts as a result of the pipeline and infrastructure changes to the water network. Essential Water was provided with a Notional Revenue Requirement of $140M for the three-year period to reflect the full efficient costs of providing water, sewerage and other services to Broken Hill customers. $71M is to be recovered from customers, which reflects IPART's reliance on the NSW Government commitment to affordable customer pricing. The $68M difference will be contributed by the NSW Government.

Financial performance

Essential Energy's earnings before interest, tax, depreciation and amortisation (EBITDA) for FY2018-19 of $777.0M was $83.4M (12 per cent) above the prior year. This resulted in Essential Energy returning a net profit after tax of $2.8M for FY2018-19 compared to a $11.6M loss after tax for FY2017-18.

Essential Energy continues to be focused on transforming operations to increase efficiency and effectiveness. In FY2018-19 Essential Energy commenced implementing a five-year whole-of-business transformation program, which required an investment of additional expenditure during the year to achieve longer term efficiencies.

The Determination provided for real price decreases for most customers through to June 2022, with increases for some untreated water customers, customers with chlorinated water, and trade waste customers to be more cost reflective.

Customer focus

Understanding the experience of our customers and reducing customer effort continues to be a focus as we work to meet our corporate value of being easy to do business with. In February 2019 we introduced a customer ease survey, with 68 per cent of customers surveyed during April to June 2019 reporting that interacting with Essential Energy required low personal effort.

Real-time customer outage messaging via our contact centre was implemented during FY2018-19 and had a positive impact on call wait times.

Essential Energy is also continuing to work with retailers to increase the pass through of email addresses, opening another channel of communication for customers who prefer to receive updates via email.

Technology services

Technology is central to keeping pace with rapid change across the energy sector, as well as supporting organisational performance. Essential Energy utilises technology and data to enable business efficiencies and benefits to customers and stakeholders and support our teams to work more safely and productively across both field and corporate areas.

Key focus areas in Essential Energy's technology transformation journey include:

- enabling enterprise wide efficiencies and cost savings through automation and process improvement
- maturing Essential Energy's information security capability – ensuring the protection of company and customer information
- rationalising and modernising our information technology infrastructure and application landscape.

During FY2018-19, Essential Energy continued building the foundational elements to achieve these objectives, including:

- implementing a significant communications network uplift, delivering improved resilience to carrier outages, significant bandwidth increases and expanded Wi-Fi coverage to more than 80 per cent of our depots and offices
- automating key processes around the preparation of regulatory information, customer interactions, field workforce management and streetlighting
- continuing to build out our application integration capability in preparation for core system upgrades and replacements
- implementing key systems and processes to uplift our baseline cyber security capability
- rationalising and modernising our telecommunications facilities, hardware and business applications, including migration to cloud based solutions where appropriate.

Company Scorecard

Area	Measure	Target	Outcome
Safety			
	Lost Time Injury Frequency Rate (LTIFR)	≤3.2	3.8
	Total Recordable Injury Frequency Rate (TRIFR)	≤17.4	17.6
	Total Recordable Injury Severity Rate (TRISR)	≤4.1	2.5
	High Potential Incident Frequency Rate (HPIFR)	≤2.9	6.5
	Overdue Corrective Actions	0	0
Customer experience			
	Reportable Environmental Incidents	≤2	0
	System Average Incident Duration Index (SAIDI) (minutes)	≤213	237
	Customer Satisfaction Index	84%	85%
	National Energy Customer Framework (NECF) Quarterly Reportable Incidents	≤4	2
	NECF Immediately Reportable Incidents	≤0	5
Financial			
	Service Target Performance Incentive Scheme (STPIS)	≥$0M	$-16M
	Net Operating Income	≥$1211M	$1284M
	Operating Expenditure	≤$471M	$507M
	Capital Expenditure	≤$521M	$483M
	Earnings Before Interest and Tax	≥$354M	$339M
Network plan delivery			
	Category 3 Tasks	5%	27%
	Planned Network Capital Delivery	100%	91%
	Planned Network Maintenance Delivery	100%	82%
People			
	Full Time Equivalent (FTE) employees	Monitor Only	3,025
	Employee Culture Index	80%	74%

Our Health, Safety and Environment

SAFETY

Essential Energy is committed to continuous improvement in safety standards and practices across our business through a targeted strategic approach for safety, health and environment. Safety is our number one value and the responsibility of every employee, every day. Our goal is to keep employees safe and healthy, and this is achieved by creating strong safety leaders and a workplace where everyone makes safety their own through appropriate actions, attention to diligence and caring for each other.

In response to our safety performance, a new Health, Safety and Environment strategy has been developed, to empower all employees to be safety leaders, making safety their own through appropriate actions, attention to diligence and caring for each other.

Using the principles of the established 'Safety is Defence' platform our approach is evolving to include effective leadership through behavioural coaching. Ongoing investment in safety leadership capability will be driven by six elements of behavioural coaching:

- coaching
- setting standards
- levels of responsibility
- modelling safe behaviour
- effective powers of observation
- positive interaction.

Focused field leadership programs will be rolled out across the business with an emphasis on leaders, who have critical influence in the safety performance and behaviours at the operational level. Everyone should be a leader for safety – empowered to contribute to improving safety and feeling confident in the decisions they make about safety. Equipping workers with the appropriate level of leadership tools and skills will ensure development of a positive and sustainable safety culture.

Alcohol and Other Drugs Procedure

Around two thirds of Essential Energy employees regularly undertake high-risk work, including live powerline tasks and activities on or near the network. Other employees not based in the field are also responsible for actions that may affect the health and safety of those that undertake high-risk activities. Also, Essential Energy employees drive around 40 million kilometres each year – and three quarters of employees who are required to drive as part of their job hold a heavy vehicle driver licence.

Having appropriate alcohol and other drug controls are extremely important for minimising risk and ensuring the safety of our employees, contractors, agency staff and the communities we serve.

In FY2018-19, a comprehensive review of our Alcohol and Other Drugs Procedure was completed. This entailed more than 200 face-to-face consultation sessions, with more than 3,500 attendees. At these consultation sessions employees were able to provide input and ask questions about the proposed updates. The feedback received from employees and other workers, combined with the feedback from unions and other internal and external stakeholders, greatly aided in the development of an updated procedure.

When the updates are implemented in early 2020, they will align our safety approach to organisations in other high-risk industries, eliminate or minimise the safety risks at work from alcohol and other drugs and empower employees to make better choices.

HEALTH

Work Capacity Assessments

Work Capacity Assessments (WCAs) form a key element of the fitness for work component of Essential Energy's safety management system and health and wellbeing strategy, by assessing a worker's medical and functional capacity to perform the inherent physical requirements of their role.

WCAs were developed for roles where the risk of developing disabling symptoms, sudden collapses, loss of consciousness or significant lack of concentration could potentially result in an unacceptable risk of a serious incident – with frequency based on an independent occupational physician review and any applicable statutory requirements.

Scheduling for WCAs began in March 2019, with 99 employees identified for the first round based on the risk categories of:

- those over 60 years of age completing live line work, driving a heavy vehicle or working on or near the network
- those over 50 years of age completing live line work.

To date 98 assessments have been completed with the Health Team currently working through the results. More WCAs are scheduled throughout FY2019-20.

Lung Bus

Commencing with Broken Hill, Buronga and Port Macquarie, the Lung Bus Mobile Respiratory Service (operated by iCare Dust Disease Care) commenced visiting sites across Essential Energy's footprint from May 2019 and will continue to visit depots throughout FY2019-20. This voluntary screening service provides early detection and referral for any respiratory abnormalities and provides employees with future access to medical records and respiratory results as required. More than 125 employees opted in during FY2018-19, with a focus on those who have been, or are at risk of, an exposure – in particular to asbestos or crystalline silica.

Other health and wellbeing programs

Designed for employees in senior leadership roles and typically exposed to pressures such as long hours, travel, high stress, decision making and an absence of regular routine, the Leader Resilience Program helps identify and manage health risks before they become critical, thereby improving resilience, adaptability and productivity. The Employee Assistance Program more generally continues to provide support for employees and their families with a confidential counselling service for work and personal concerns.

Ignite

Understanding the link between health and safety performance, Essential Energy is committed to developing a proactive health and safety culture, a positive approach to mental health and instilling a growth mindset within our people.

Ignite, Essential Energy's health and wellbeing program was introduced in FY2018-19, with a focus on supporting individuals to proactively make healthy choices to create better health and build resilience – rather than focus on recovery from poor health, injury or illness.

Ignite sessions focused on topics relating to:

- general health awareness, body composition analysis, nutrition, exercise, fatigue and connection to others through vulnerability
- mental health awareness, behaviour, communication and connection with others
- mental health first response and constructing conversations to support others.

Since the program began in September 2018, there have been more than 4,000 attendances at Ignite sessions, with survey responses indicating:

- 92 per cent have been inspired to be more focused on their health and wellbeing
- 50 per cent are more active than they were before the program
- 61 per cent are eating better than they were before the program.

Ignite will continue to grow and build the health and wellbeing of our workers into FY2019-20, with future modules currently in design, with the first focussing on the impacts of fatigue.

Our Health, Safety
and Environment – continued

ENVIRONMENT

Managing environmental risks in a socially responsible manner and in accordance with legal requirements is also a business imperative for Essential Energy. We are committed to continually improving our environmental management system and ensuring its compliance with the relevant environmental legislation while enabling the effective mitigation of operational environmental risks.

Improvements in environmental performance, management of environmental risks and the implementation of strategic initiatives within Essential Energy will encourage our workforce to work responsibly and assist in further embedding an environmentally considerate culture, respecting the environment and the communities in which we operate and upholding the needs of future generations.

Essential Energy operates an Environmental Management System (EMS) certified to ISO 14001, with recertification (including independent audit and external surveillance audit) completed in FY2018-19.

In FY2018-19, there were no reportable environmental incidents under applicable legislation.

Achievements in FY2018-19 included:

- completion of environmental impact assessments in support of new capital projects, vegetation maintenance works and development applications
- delivery of the FY2018-19 contaminated land management program on budget and on schedule
- release of the inaugural Biosecurity Procedural Guideline and provision of supporting training
- obtaining a water access licence with the Natural Resource Access Regulator for Menindee emergency supply.

For FY2019-20, several initiatives have been identified, to:

- reduce the complexity of environmental compliance
- increase productivity by applying innovation
- employ technology to make completing tasks smarter
- streamline environmental impact assessment processes for new works
- confirm access agreements for works within land reserved under the *National Parks and Wildlife Act 1974.*

Our **Customers**

Engagement

Key milestones achieved in stakeholder engagement in FY2018-19 were the refresh of the Stakeholder Engagement Framework, directly linking to Essential Energy's Corporate Strategy, and the development and implementation of the Stakeholder Engagement Strategy, to ensure best practice in stakeholder engagement is embedded across the business.

The benefit of this type of planning was highlighted in the successful outcomes achieved during the preparation of the 2019-2024 Regulatory Proposal. For this process a comprehensive customer engagement and feedback platform was established, covering Essentials Energy's broad base of customers – from large industrial and commercial customers to councils, small business and residential customers. These customers are located across a broad geographical area spanning regional, rural and remote NSW, stretching from Broken Hill in the west to the NSW east coast.

As part of the Regulatory Proposal engagement program, an external organisation was employed to help the business run a series of deliberative customer forums across the network area to ensure objective, accurate and insightful feedback. A significant challenge for the project was people's awareness of Essential Energy's function in delivering electricity. Customers generally know who their retailer is, who sends them their bill, but have little awareness of the distributor. The forums were a vehicle for informing customers as much as being a platform for feedback. This has delivered tremendous benefits in terms of brand clarity and customer understanding of Essential Energy's services.

During FY2018-19, as the AER largely accepted Essential Energy's Regulatory Proposal, consultation was undertaken on areas where the AER asked for further consideration of specific issues. Three deliberative customer forums were held, as well as three stakeholder deep dives, in-depth interviews with large customers and retailers, and an online forum.

In recognition of this industry leading approach to customer and stakeholder engagement, Essential Energy won the 2018 Energy Consumers Australia and Energy Networks Australia Consumer Engagement Award. The award acknowledged the quality and impact of the Stakeholder and Customer Engagement Program on how Essential Energy treats its customers.

As part of the business' commitment to operating at best industry practice, FY2019-20 engagement plans include:

- delivering on actions from 2019-24 Regulatory Proposal engagement
- continuing to embed stakeholder engagement across the business
- collaborating with industry to implement The Energy Charter.

The Energy Charter

In January 2019, Essential Energy became a founding member of The Energy Charter, a voluntary industry initiative open to businesses across the gas and electricity supply chains: from generation and transmission to distribution and retail.

The Energy Charter represents the first whole-of-industry approach to addressing community expectations. It focuses on embedding a customer-centric culture in energy businesses to create tangible improvements in affordability and service delivery, with the vision of 'together, deliver energy for a better Australia.'

Essential Energy's values of being easy to do business with, making every dollar count, and being courageous to shape the future closely align with the Charter's principles. We, along with the other signatories, recognise the importance of energy for our customers and communities, and have committed to placing customers foremost within our businesses. With collective accountability, customers can feel confident that the energy sector is working together to build trust and value.

An internal Energy Charter working group, comprising representatives from across Essential Energy's business divisions, was established to embed the Charter in our business and compile our inaugural Charter disclosure statement for January to June 2019. Building on our strong customer-centric culture across the business while recognising areas for improvement, this first statement focuses on:

- understanding our current performance against the Charter principles and identifying opportunities for improvement
- ensuring the business is accountable for improving services to customers and improving the customer experience
- implementing appropriate actions to deliver changes in corporate culture and services that will benefit customers in the future.

The statement, submitted by 30 September 2019, will be reviewed by the Charter's Independent Accountability Panel – comprising a cross-section of independent consumer and industry representatives advocating on behalf of customers.

Customer Advocacy Group

Essential Energy's Customer Advocacy Group (CAG) has been meeting for more than 20 years, and includes a diverse membership across age, location, gender and industry. The CAG uses deliberative engagement to consult on a range of issues, initiatives and programs including (but not limited to) regulatory proposals, vegetation management, bushfire preparedness, licence conditions and critical infrastructure.

Two face-to-face meetings and two video conference meetings are held each year, along with consultation and participation in engagement activities outside these meetings.

The Energy Charter

The approach results in:

- candid conversations built on trust – providing critical feedback to inform business decisions
- development of trusted third-party advocates in the community
- a channel for accountability
- support for divisional and corporate values, purpose and business objectives.

In FY2019-20, this approach will continue with:

- a deep dive into issues such as the IPART Reliability Standards and long-term tariff reform, tariff trials, embedded networks, voltage management (operational and strategic) and distributed energy resources
- the consultation committee providing advice, discussion and feedback on matters relating to the supply of electricity and associated services impacting Essential Energy customers and community
- further discussion and exploration of ideas to create an understanding of why and how outcomes can deliver value for customers and community.

The third point is expected to be particularly useful as the business looks to comply with recent licence condition changes, which were not included in the 2019-24 Regulatory Proposal.

Marie Russell lives in the Essential Energy network footprint and describes herself as "proud to be part of the CAG". Marie and former CAG member Cathy Budda-Deen have been advocates for the development of a Reconciliation Action Plan for Essential Energy and have been pleased with the start Essential Energy has made in FY2018-19.

"Congratulations to Essential Energy for their leadership in embracing Aboriginal and Torres Strait Islander people in their diversity strategy – a major step forward. The diversity of programs is so impressive – well done."

Customer contact numbers

In FY2018-19, Essential Energy's Contact Centre recorded 445,345 customer contacts, compared to 425,911 in FY2017-18 and 482,384 in FY2016-17. The slight increase in phone calls, compared to FY2017-18, was due to significant storm activity during FY2018-19.

Implementation of call recording within the Contact Centre in May 2019 was a key achievement of FY2018-19, supporting improved coaching and safety. The replacement of automated messaging with real-time location-based outage information in June 2019 will ensure reduced call wait times during large network events.

The roll out of the ServiceNow Customer Interaction Management System, in February 2019, was well received, with organisation-wide training ensuring employees were well supported to better service and resolve customer interactions, enquiries and complaints.

Over the year, Essential Energy received 3,079 customer complaints ranging from vegetation management to meter reading to streetlight maintenance. These complaints resulted in 1,436 power quality investigations. Essential Energy matters accounted for 31 per cent of all distribution matters closed with the Energy and Water Ombudsman NSW. In the latter part of the year customer investigation forms and frequently asked questions were updated to provide better information upfront to customers when considering claims, with a view to reducing claim volumes and improving response turnaround times.

Digital presence

Traffic to our website, www.essentialenergy.com.au, for FY2018-19 was 2,385,140 sessions, with 840,000 unique users. Essential Energy's social media community on Facebook, Twitter, LinkedIn, YouTube and Instagram, increased by 29 per cent. Social engagement – where people connected with our posts – generated more than 210,000 interactions and 6 million total impressions across all social channels.

National Energy Customer Framework

The National Energy Customer Framework (NECF) was introduced to NSW on 1 July 2013, to provide a consistent regulatory framework for the relationship between customers, energy retailers and distributors.

In FY2018-19, Essential Energy recorded five Immediately Reportable breaches that were reported to the AER, up from zero in FY2017-18. Four of these incidents involved life support customers not being given four business days' notice of a planned interruption, and one incident involved incorrect de-energisation of a life support customer's premises. Two Quarterly Reportable breaches were reported to the AER, compared to four in FY2017-18. Both incidents involved the incorrect de-energisation of a customer's premises.

Essential Energy maintains a strong ongoing commitment to improving customer service and, more importantly, customer safety, as defined by the NECF obligations.

Translation services

In FY2018-19, interpreting services were provided to customers a total of nine times, for Cantonese, Mandarin, Turkish, Vietnamese, Arabic, Japanese, Czech and Thai. The total expenditure for interpreting and translating services was $246.38. There are no employees who use their language skills in their daily roles. No staff are in receipt of the NSW Community Language Allowance Scheme (CLAS) allowance.

Customer Advocacy Group meeting in Wagga Wagga

Our **People**

HOW WE ATTRACT

Refreshed onboarding program – Welcome Me

To enhance the employee experience, our onboarding and induction activities have been refreshed and rebranded to become the 'Welcome Me' program. The intention is to improve the employee experience, with key improvements including:

- updated online learning modules, with content designed to be engaging and to better explain 'what we do' and 'what we care about'
- enhanced communication tools and messaging to new employees and line managers with refreshed email communications, guided conversations tools, scheduled check-in discussions, and updated intranet materials
- a New Employee group on Workplace, the internal social sharing tool, enabling new recruits to ask questions and share experiences
- assigning new recruits with an existing employee 'buddy' to foster a supportive and inclusive culture.

New onboarding surveys are providing insights on employee engagement upon commencement into Essential Energy. Survey feedback from 2019 new hires indicates that overall, an employee's first week meets expectations, however 62 per cent felt their teams were not well prepared for their arrival, indicating there is more work to be done to help employees settle and become productive.

Early talent pathways

Our future success as an organisation relies on our ability to build a workforce that can respond to the changing energy sector and reflects the communities we serve. Our apprenticeship, traineeship and engineering graduate programs are key to these efforts. Applicants for all of these programs had a diversity of backgrounds, allowing us to recruit the best people for the roles and supporting our efforts to become a diverse and inclusive workplace. More than two-thirds of the new apprentices and trainees identify themselves in at least one diversity group. This includes ten Indigenous men and women and ten females. The programs are also bringing younger people into the organisation, with almost half the 2019 apprentices under 21 and more than half the 2019 engineering graduates under 25.

HOW WE WORK

Employees completed the annual engagement survey in June 2018. Participation significantly increased to 82 per cent – the highest participation rate seen in the organisation to date. This provided a reliable representation of views, opinions, comments and suggestions on ways to make Essential Energy a better place to work. The results and insights gathered from our teams influenced people planning in FY2018-19.

In February 2019, an interim engagement survey was conducted capturing feedback from a statistically representative sample of the organisation. Results reflected an increase in the Engagement Score of 0.27 to 3.71. Results also showed an increase in the Engagement Index with 30 per cent of employees engaged compared to 15 per cent in the survey held in June 2018.

Formally, Essential Energy measured the organisation's feedback results by using a Cultural Index. The Cultural Index continued to be measured and reported in the Company Scorecard during FY2018-19. In June 2018, the Cultural Index was reported at 61 per cent. When reported in Quarter Three there had been a significant increase to 74 per cent.

Annual engagement surveys will continue to be conducted to measure and track progress of people initiatives and to use the insights to further inform strategic objectives.

HOW WE GROW AND LEARN

Leadership programs – Leading Effective Teams

Anchored by an organisational behavioural framework including our Values and Leadership Skills, Essential Energy is focused on tailoring solutions to ensure appropriate outcomes for each level of leadership. Key to this success is creating shared vision and goals through group learning and networking, collaboration, skills development and promotion of peer interactions. To this end, 168 frontline leaders participated in two-day Leading Effective Teams workshops and then went on to build and reinforce their skills through online leadership modules. This program concluded in October 2018. Feedback on the program, and engagement in eLearning content, continues to be positive.

Study assistance

Driven by organisational capability needs, Essential Energy invests in formal educational arrangements to empower the growth and development of employees. The program provides pathways that build capability and addresses potential future skills shortfalls within the organisation. In FY2018-19, the formal education program provided financial support to 295 employees for courses and qualifications ranging from Certificate III through to Masters and assisted 33 employees complete their qualifications in a range of areas including business, project management, warehouse, logistics, electrical, leadership and management, human resources and information technology.

Coaching for performance

Essential Energy is investing heavily in building the leadership and capability of our people, specifically, recognising the importance of coaching in good leadership. A two-day Coaching for Performance program was developed and delivered in FY2018-19. Communication and better performance management were highlighted as opportunities in the 2018 employee engagement survey. Providing leaders with the tools to help employees align with achieving organisational goals is critical to ongoing organisational success.

The pilot held in December 2018 was split into two days, with two to three weeks between each session, to ensure the 15 participants were provided with ample opportunity to practise their skills, as well as follow up and refine their capability. The training modules are practical with a strong focus on real life exercises and activities so that the knowledge resonates with participants and enables faster knowledge transfer. Following the success of the pilot and based on the identified measures of success, a further 85 employees have completed the program.

Who's Promotable Asset Management and Engineering

Essential Energy was experiencing low levels of engagement, with career development identified as a key area for improvement. More than 30 per cent of Asset Management and Engineering employees indicated they were ready for promotion, but only 17 per cent of roles filled internally. There was a strong need to map existing talent across levels and use data-driven insights to inform targeted development and strategic talent management.

Essential Energy partnered with Hudson to implement an evidence-based and innovative talent management solution, underpinned by Hudson's Leadership Blueprint methodology. This solution was designed to support Asset Management and Engineering employees with the aspiration to progress with ongoing development, and ensure they are competitive for future progression opportunities, as well as to provide data-driven insights and answers to business-critical issues.

There was strong alignment with organisational strategy and context, given the solution was underpinned by and tailored in line with Essential Energy's leadership framework. Data from existing talent management processes was also incorporated into the solution – including engagement survey results, FY2018-19 performance review data, talent 9 box mapping and succession planning indicators.

The program achieved meaningful and measurable outcomes within Asset Management and Engineering: engagement increased by 25 per cent; improvements in career mobility – 28 horizontal/vertical moves within six months; a 19 per cent increase in roles filled by internal candidates; valuable insights about common development areas are used to inform investment in learning and development programs; plus a 21 per cent decrease in total reportable incidents.

Apprenticeship Program

Essential Energy's workforce planning initiatives include a pipeline of internally developed talent through the Apprenticeship Program. Essential Energy is proud of our ongoing Apprenticeship Program, with more than 1280 apprentices trained since 2003. This throughput of apprentices brings significant employment and development opportunities to regional and remote communities across NSW. A further 27 Certificate III ESI Power Systems Distribution Overhead apprentices and five Certificate III Electrotechnology Electrician apprentices commenced their training in 2019, as well as an additional six Certificate II Asset Inspection trainees. In addition to this, a further five Certificate II Electrotechnology Career Start pre-employment trainees commenced as part of the Indigenous Pre-Employment Program.

In FY2018-19, there were 102 apprentices in training, comprising 84 Powerline Workers, 17 Electricians and one Business Administration Trainee, with training progress spread across the first three years of the four-year program. Apprentice Powerline Workers receive their off-job training through Essential Energy's Enterprise Registered Training Organisation (RTO) at one of our three regional-based Training Centres, in Grafton, Parkes and Goulburn. Training for apprentice Electricians is conducted by TAFE NSW RTO.

The first Powerline Workers apprentice cohort of 25 students is due to graduate during FY2020-21, and a new intake of 25 apprentices is planned for February 2020.

The Apprenticeship Program is an integral part of Essential Energy's commitment to diversity and inclusion in the workplace, with 18 females employed as apprentices in non-traditional trade roles over the past three years. The program also underpins Essential Energy's geographic dispersion, with apprentices being recruited from, and working in, many of the regional towns containing field depots across our footprint. For our current apprentice program, we proactively drive diversity, with our statistics for female and Aboriginal and Torres Strait Islander groups considerably above the NSW and Commonwealth averages for the type of apprenticeships we deliver, with 18 per cent of our apprentices being female and 26 per cent being of an Aboriginal and Torres Strait Islander background.

During FY2018-19, an application was made for the Essential Energy RTO to receive Training Services NSW Smart and Skilled funding for the delivery of the Certificate III apprentice Powerline Worker program, and this was approved in February 2019.

Completion rates for our trade-based apprenticeships is another major area of which Essential Energy is extremely proud. Compared to the national average (55 per cent for trade apprenticeships, according to the National Centre for Vocational Education Research Report (NCVER) July 2018, and 35 per cent for Indigenous apprentices, according to the NCVER Report 2017), our completion and retention rate is an enviably above 90 per cent across both completion and retention.

TECHNICAL TRAINING

Network Essential training

Network Essential training and assessment, including initial and refresher Annual Regulatory and Switching training and assessment, remains the core and bulk of the work of Essential Energy's RTO. During FY2018-19, approximately 2020 employees undertook Regulatory Refresher Assessments, and 1700 for Switching Authorisation.

Cable jointing

A Cable Jointing Training Needs Analysis (TNA) was conducted, identifying capability gaps, which were addressed through a Practicing Cable Jointer development program involving 60 participants. Cross-training of Powerline Workers to become Cable Jointers commenced with 18 participants undertaking training in the required additional Units of Competency to gain the qualification.

Management-initiated training

Management-initiated training rollouts have met the demand for safety awareness programs. These have included practices for live low-voltage work, heavy vehicle stability (dunnage) awareness, equipotential and personal potential bonding awareness, reinforced/re-instated pole policy update training, and the introduction of a new cable jointing product.

Simulated switching network

A purpose-built, simulated switching network has been constructed and commissioned at Rocks Ferry, NSW, to provide an all-weather facility for initial switching training. Plans have also been developed to replicate this facility at other strategic sites across our footprint over coming years. The centre incorporates all the necessary components of a zone substation, including high voltage (HV) and low voltage (LV) distribution network, and covers the full range of field switching authorisations. The centre allows for training of Zone Substation Protection Technicians in a range of activities and complements the training and authorisation of System Operators.

Having this facility allows more consistent, repeatable assessment or training be carried out, in all-weather conditions. Efficiency is greatly improved with no lost time due to having to travel to different sites, and only having to have one job discussion and prepare one risk assessment, and with no traffic control needed. Having closer contact between the participant, switchgear and trainer/assessor allows more in-depth training and assessments due to being able to carry out functions that would not be possible or would require large involved switching of the network. It also provides a wide range of flexibility and variables allowing multiple manipulations of switchgear without placing undue pressure on the system.

Training scheduling

Training management and administration process have been re-structured to improve trainer/assessor utilisation. Training scheduling has been centralised and is working towards further development of customer-focused, predictive scheduling to minimise disruption to field work.

Online training

As a business, our online training capability continues to expand. This reporting period has resulted in major improvements to the way online training is delivered and administered. Efficiencies achieved include automated online enrolment forms, learning reports and feedback.

Modernisation of learning resources and training delivery has been a priority for the Learning Design team during FY2018-19. The introduction of third party delivered online training for our apprentice Powerline Worker program has been a success, with potential for future expansion.

Additionally, the development of 3D digital twins is being explored to supplement current training delivery methods to increase interactivity and engagement. 3D digital twins enable apprentices to be placed into virtual worlds where they can safely explore low probability/high consequence scenarios without danger to themselves or the network.

Online learning platforms have also been implemented, allowing user-initiated, just-in-time learning access to more than 5,000 video tutorials covering many aspects of business, including finance, risk, governance and technology.

With the implementation of JobReady Plus and Cloud Assess, Essential Energy has realised substantial efficiencies in the coordination of routine tasks allowing administrators to focus on the quality and effectiveness of the training programs. Training records management has seen significant improvements by providing a centralised repository for all training results allowing Essential Energy to consistently demonstrate compliance with critical regulatory requirements.

Our learning management systems provide specific quality management and compliance benefits by connecting training with document revision and all other quality processes. Providing students with the freedom to complete online learning content, and offering automated marking and reporting of results, is an important advancement to our online training strategy. Paperless, online assessment also contributes to Essential Energy's commitment to environmental sustainability.

EMPLOYEE RELATIONS

The Essential Energy Enterprise Agreement 2018 and the Essential Energy Far West (Electricity) Enterprise Agreement 2018 continue to apply to employees in Essential Energy. Both enterprise agreements have a nominal expiry date of 30 June 2021. The enterprise agreements provide for wage increases over their nominal term in line with movements in the Consumer Price Index, subject to being no less than two per cent or more than two and one-half per cent on an annualised basis. The initiatives contained in the enterprise agreements assist in achieving improvements in productivity, efficiency and workplace flexibility.

The Essential Water Enterprise Agreement 2016 has a nominal expiry date of 27 October 2019. Negotiations for a replacement enterprise agreement commenced in August 2019.

DIVERSITY AND INCLUSION

FY2018-19 saw further development in our corporate vision and strategy for diversity and inclusion, as we continue to build an inclusive and diverse workforce, reflective of the communities we serve, where people can bring their whole selves to work every day.

Our priorities:

- ensuring employees feel heard, respected, empowered and a sense of belonging
- applying an inclusive and diverse focus to all aspects of the employee experience including identification, attraction, development, mobilisation and retention
- making an inclusive culture part of our employer brand; sharing and promoting our story widely to both internal and external customers
- using data insights to make evidence-based decisions and drive effective business solutions across all diversity streams.

Our focus areas:

- gender equality
- Aboriginal Torres Strait Islander peoples
- people with disability
- people who identify from culturally and linguistically diverse backgrounds
- people who identify as Lesbian, Gay, Bisexual, Transgender and Intersex (LGBTI).

Gender equality

In our gender stream, there has been continued focus on attracting more females into the organisation, with a specific focus on operational roles. Essential Energy increased the use of diversity-focused job platforms and information hubs and developed profile pieces highlighting the professional achievements of our female employees for industry platforms, including the National Association of Women in Operations and Work180. We also recognised the achievements and contributions of women through our International Women's Day 2019 celebrations across our network footprint.

Essential Energy's Targets and Progress as at 30 June 2019

Representative Group	Essential Energy Proposed Target by 2020	Essential Energy Proposed Target by 2025	Progress as at 30 June 2019
Women in the organisation	22%	35%	17.60%
Women in leadership	35%	50%	30.70%
Aboriginal and Torres Strait Islander people in the organisation	3.90%	6%	4.00%
Aboriginal and Torres Strait Islander people in leadership roles	8%	15%	0%
Multicultural	1.10%	3%	2.00%
DisAbility	2.50%	3%	1.60%
LGBTI	NA	6%	1.30%

Trends in the Representation of Workforce Diversity Groups

Workforce Diversity Group	Benchmark	2017	2018	2019
Women	50%[1]	15.1%	15.9%	17.6%
Aboriginal and/or Torres Strait Islander People	3.3%[2]	2.8%	3.7%	4.0%
People whose First Language Spoken as a Child was not English	23.2%[3]	1.0%	1.9%	2.0%
People with Disability	5.6%[4]	1.6%	1.7%	1.6%
People with Disability Requiring Work-Related Adjustment	N/A	0.5%	0.5%	0.5%

Note 1: The benchmark of 50% for representation of women across the sector is intended to reflect the gender composition of the NSW community.

Note 2: The NSW Public Sector Aboriginal Employment Strategy 2014 – 17 introduced an aspirational target of 1.8% by 2021 for each of the sector's salary bands. If the aspirational target of 1.8% is achieved in salary bands not currently at or above 1.8%, the cumulative representation of Aboriginal employees in the sector is expected to reach 3.3%.

Note 3: A benchmark from the Australian Bureau of Statistics (ABS) Census of Population and Housing has been included for People whose First Language Spoken as a Child was not English. The ABS Census does not provide information about first language, but does provide information about country of birth. The benchmark of 23.2% is the percentage of the NSW general population born in a country where English is not the predominant language.

Note 4: In December 2017 the NSW Government announced the target of doubling the representation of people with disability in the NSW public sector from an estimated 2.7% to 5.6% by 2027. More information can be found at: Jobs for People with Disability: A plan for the NSW public sector. The benchmark for 'People with Disability Requiring Work-Related Adjustment' was not updated.

Trends in the Distribution of Workforce Diversity Groups

Workforce Diversity Group	Benchmark	2017	2018	2019
Women	100[1]	100	98	98
Aboriginal and/or Torres Strait Islander People	100	88	82	80
People whose First Language Spoken as a Child was not English	100	114	113	115
People with a Disability	100	100	98	95
People with a Disability Requiring Work-Related Adjustment	100	N/A[2]	N/A	N/A

Note 1: A Distribution Index score of 100 indicates that the distribution of members of the Workforce Diversity group across salary bands is equivalent to that of the rest of the workforce. A score less than 100 means that members of the Workforce Diversity group tend to be more concentrated at lower salary bands than is the case for other staff. The more pronounced this tendency is, the lower the score will be. In some cases, the index may be more than 100, indicating that members of the Workforce Diversity group tend to be more concentrated at higher salary bands than is the case for other staff.

Note 2: The Distribution Index is not calculated when the number of employees in the Workforce Diversity group is less than 20 or when the number of other employees is less than 20.

Aboriginal and Torres Strait Islander

In FY2018-19, we commenced development of our inaugural 'Innovate' Reconciliation Action Plan (RAP), recognising the importance of our reconciliation journey. Essential Energy has committed to delivering a genuine and geographically relevant RAP, with a focus on strong relationships with the Aboriginal and Torres Strait Islander communities we serve, built on trust and respect. Cultural diversity makes us stronger and we will drive to improve our understanding and awareness and celebrate these differences.

To attract more Aboriginal and Torres Strait Islander people into our organisation, we commenced use of ATSIJobs, a diversity-focused job platform and information hub, specifically focussed on corporate streams. Also, the Indigenous pre-employment program continues to provide support and development to male and female Indigenous participants in the areas of literacy and numeracy, while also providing exposure to workplace skills and knowledge. In 2019, five participants commenced on the program from across our regional footprint. Upon successful completion of the twelve-month program, participants can potentially transition to the Apprentice Powerline worker program.

Our Indigenous Scholarship program provides financial support to Indigenous students studying at regional universities across NSW. In 2018, two female students were the successful inaugural recipients. They will receive $10,000 per year towards their study and living costs for the duration of their study. In addition, the students will be invited to undertake work placements with the business to provide exposure to a commercial environment.

Multicultural

Essential Energy's objective for its Multicultural stream is to build a culturally aware and supportive organisation that is inclusive of employees from all backgrounds.

Our partnership with Career Seekers over the last 12 months provides support for both refugees and people seeking asylum who are either at university or looking to restart their professional career in Australia.

The Multicultural working group continues to work with the Human Resources team to develop and implement processes to assist new employees from different cultural backgrounds as they settle into the business, and the business has partnered with Charles Sturt University to offer 12-week placement opportunities to students from multicultural backgrounds.

Efforts to broaden cultural diversity within Essential Energy continued through celebrations of culturally and linguistically diverse holidays and events including Ramadan and Diwali, along with the annual Harmony Day cook-off held in March 2019, with $1,180 raised for the North Coast Settlement Service.

Essential Energy has not entered into any agreements with Multicultural NSW under the *Multicultural NSW Act 2000*.

Disability

Essential Energy partnered with JobAccess Australia to increase disability awareness amongst all employees. Celebrations for AccessAbility Day 2018 saw Essential Energy host 27 participants, contributing the highest number of participants of any regional organisation in Australia registered with JobAccess Australia.

LGBTI

In March 2019 Essential Energy participated in the Australian Workplace Equality Index and was benchmarked against both private and public sector across Australia. Participation in these awards has demonstrated the excellent work the LGBTI working group has achieved including the introduction of the Essential Pride ALLY Network, along with observing, promoting and celebrating IDAHOBIT Day 2019 and Wear it Purple Day 2018.

Our **Work**

FAULTS AND EMERGENCY RESPONSE

In FY2018-19, Essential Energy's network was impacted by various factors that challenged employees and systems to respond safely and quickly to restore power to impacted communities. Conditions including severe storms, hail and bushfire events, malicious attacks and traffic accidents, saw employees at the centre of emergency response efforts in extreme situations. Following is a summary of some of the significant events that impacted the network during FY2018-19.

Significant events summary

From 9 to 11 December 2018, a significant weather event moved through the Murray area, causing power outages for more than 1,300 customers in Finley, Jerilderie, Mayrung, Blighty, Deniliquin and surrounding areas. The damage meant that 15 power poles needed to be replaced. Almost 1,000 customers had their power restored on 9 December, with the remaining customers having their supply restored progressively on 10 and 11 December 2018.

On 13 and 14 December 2018, storms caused unplanned outages for more than 12,500 homes and businesses, including more than 5,000 in the New England North West. Most outages were caused by lightning strikes or vegetation impacting the network due to high winds. Additional crews and equipment were sent to the worst affected areas, and crews worked as quickly as safety allowed to make repairs.

On the afternoon of 16 December 2018, lightning caused damage on the main powerline to Kootingal and Moonbi, and parts of Bendemeer, Daruka and Moore Creek, near Tamworth, impacting 8,500 customers. The high number of resulting faults, combined with difficult to access terrain, meant power was not restored until the afternoon of 17 December 2018.

On 20 December 2018, major storms caused unplanned outages for more than 60,000 homes and businesses across much of Essential Energy's distribution network. The impacted areas spanned from Bulahdelah to the Coffs Coast and west to the Narrabri, Tamworth and Walcha, with southern parts of the state impacted to a lesser extent. More than 773,500 lightning strikes were recorded in 24 hours within an 800 km radius of Port Macquarie alone. In the Narrabri area, more than 40 power poles required replacing due to the storm. In the following days more storms swept through the Far North Coast, causing power interruptions for an additional 12,500 customers.

To restore power, crews worked through the night of 20 December, over the weekend and on the days around Christmas. Within 24 hours, power had been restored to nearly 50,000 customers. By the end of Sunday 23 December, fewer than 500 customers remained without power, with power restored to all customers by Thursday 27 December. This was a very significant restoration effort, with more than 300 field employees, supported by office employees, working to fix more than 1,300 high voltage network and single premises incidents, along with much work to fix many low voltage connections.

On the afternoon of 10 and 11 January 2019, more than 6,500 homes and businesses were affected by unplanned power outages due to storms. The Central West was one of the worst hit areas, with a large number of separate faults affecting more than 1,200 homes and businesses in the wider Bathurst area alone. Crews worked into the weekend to restore power for all homes and businesses, with almost all homes and businesses having power restored by Saturday, 12 January 2019.

On 17 and 18 January 2019, severe storms caused unplanned outages for more than 3,900 customers in Queanbeyan, Bungendore, Sutton, Braidwood, Yass and surrounding areas. Crews worked throughout the night in challenging conditions to restore supply. Due to the extensive damage, more than 3,200 customers remained without supply until 18 January 2019. Additional crews were deployed to assess the network and carry out necessary repairs, with helicopters used to assist crews with line patrols. Power was fully restored by the evening of 18 January 2019.

From 22 to 24 January 2019, storms caused unplanned power outages for more than 3,000 homes and businesses in Parkes and the surrounding area. As crews had nearly restored power to all these customers on 23 January, another storm impacted the area, causing unplanned outages for more than 2,400 homes and business, which had also been impacted by the outage due to the earlier storm. Power was restored to all customers by the afternoon of 26 January.

On 29 and 30 January 2019, storms caused unplanned power outages for more than 4,700 homes and businesses in Bathurst and the surrounding area. Lightning, wind and torrential rain caused a range of faults. While most customers had power restored overnight, power restoration efforts continued until late on 30 January 2019.

MAJOR PROJECTS

The below list is a sample of Major Projects completed during FY2018-19. Major Projects are internally funded electricity system investments with total direct costs exceeding $1M.

Description	Before FY2018-19 Inc overheads (direct project $)	2018-19 Inc overheads (direct project $)	Total Cost Inc overheads (direct project $)	Completion month*	Comments
Bullocks Flat - zone substation#					
	$989,522	$1,638,783	$2,628,305	May 2019	Substation refurbishment and capacity uplift
Bulahdelah - zone substation					
	$3,478,183	$1,868,875	$5,347,058	Dec 2018	Substation refurbishment
Nyngan Town - zone substation					
	$2,175,422	$1,400,326	$3,575,748	Mar 2019	Substation refurbishment
West Wyalong - zone substation					
	$775,309	$1,235,627	$2,010,936	May 2019	Replace substation transformer
Nambucca Heads - zone substation#					
	$3,558,455	$1,011,858	$4,570,313	Sep 2018	Replace 11kV switchboard
Orange North - zone substation					
	$4,583,111	$754,390	$5,337,501	May 2019	Substation refurbishment
Kew - zone substation#					
	$2,652,826	$633,160	$3,285,986	Feb 2019	Replace 11kV switchboard

* Completion month is practical completion, not final completion

\# Costs include project specific bank guarantees (36 month duration)

FY2018-19 saw commencement of the refurbishment of 15km of 33,000-volt powerline between Casino and Mallanganee. This work is to be undertaken as part of the staged project to replace 34km of deteriorating conductor over coming years, with stage one (planned for completion by the end of 2019) also aligned to the installation of a diesel generator as a backup supply within the Urbenville Zone Substation. This project will improve power supply, safety and reliability, while also providing an alternative power supply option in the area, as backup in the event of a power outage.

Wingham Zone Substation, constructed during the early 1960s, supplies the town of Wingham and surrounding districts. With much of the equipment within the Zone Substation now reaching end-of-life, a project is now underway to refurbish the Zone Substation, forecast for commencement by June 2020.

This work will improve the reliability of supply to the residents of Wingham and reduce operational expenditure risk due to consequence of end-of-life asset failure.

Residents of Tumut will experience improved reliability of supply thanks to the refurbishment of the Tumut Zone Substation, forecast for completion in late 2019, having been identified as requiring upgrade due to numerous equipment failures attributed to the age of the installation, with the transformers within the site constructed in 1959.

A significant growth area for Essential Energy continues to be in the Large-Scale Connections space, with approximately 900MW of generation capacity (both solar and wind combined) now in the development pipeline. While this is not yet all committed project work, there are several individual projects underway that are significant and/or complex, including Nevertire (105MW solar) and Hillston (85MW solar).

Streetlighting

The availability of smart streetlight control systems and high efficiency LED streetlights has led to rapid change in streetlighting, and Essential Energy continues to work closely with streetlighting customers and stakeholders to develop appropriate solutions that meet their changing needs and expectations.

In FY2018-19, Essential Energy invested significant resources into streetlighting as part of our commitment to being easy to do business with and making every dollar count. Key milestones were achieved, with Essential Energy undertaking comprehensive stakeholder engagement to establish needs and barriers for local councils, and the introduction of new delivery efficiencies and implementation of an asset management strategy.

Roll out of new LED luminaires in conjunction with the scheduled cyclic Bulk Lamp Replacement (BLR) program has enabled accelerated replacement of older technology, resulting in lower public charges to councils. Uptake of new LED technology has led to an average cost reduction of 30 per cent achieved through energy savings, along with lower maintenance costs and greenhouse emissions.

In FY2019-20, Essential Energy will continue to work closely with councils towards the goal of 100 per cent LED, delivering lower costs and improved service standards to councils. Further improvements will include implementation of streetlight component billing, which will simplify billing processes, improving transparency and reducing barriers to new technology. Essential Energy now provides funding as an option for LED upgrades, removing funding barriers to councils and enabling all NSW regional councils to benefit from LED technology.

Asset inspections

At Essential Energy we conduct several asset inspection programs as part of our commitment to ensure that we do the right work, at the right place, at the right time. Inspections and asset condition data capture are achieved through a variety of methods, ranging from manual ground-based techniques, to the use of leading technologies such as 3D laser scanning, LiDAR and drone-based High Definition pole-top photography. These inspections ensure the safety and reliability of our expansive network.

Asset inspection drone trials

The Asset Inspector (AI) drone trial started with two AIs in May 2018, increasing to 11 AIs by 1 May 2019. The parameters of the trial were set to ensure effective use of drones with minimal disruption to the AI program. During 11 months of the trial, 30,614 images were taken across 1925km of network by 10 AIs. AIs acknowledge that drones allow them to assess the condition of network assets from above and reduce the time required to assess and complete inspection of the asset's condition when compared to the traditional method from the groundline only.

Using drones for the capture of pole-top imagery also improves the safety of operations around the network, in particular where low-level aircraft hovering or flying poses a significant risk for flight crews or disruption to customers. Where full-size flights are restricted due to weather, drones can safely work near the network in windy conditions – up to 38km/h without incident. Drones have also been deployed in critical areas to capture data where the annual Aerial Patrol and LIDAR flights cannot take place due to full-size restrictions such as noise abatement areas or within the vicinity of dwellings.

Vegetation management

During FY2018-19, work commenced to develop a long-term Vegetation Management Strategy for Essential Energy, as part of our commitment to operating at industry best practice for efficiency and delivering best value for customers. Vegetation management currently represents the largest operational expenditure for Essential Energy, and the Vegetation Management Strategy will improve the maturity of the vegetation management program, releasing available operational efficiency. Importantly, the strategy will ensure continued successful delivery of safety, quality, reliability and legal compliance objectives. Completion of the strategy is scheduled for December 2019, with implementation to commence in 2020.

While this very important strategy development work continues, the operational outcomes from our vegetation management programs saw ongoing improvement, with more than 250,000 spans treated during FY2018-19 (up from approximately 210,000 in FY2017-18 and approximately 200,000 in FY2016-17). This uplift in operational delivery included completion of 44,488 high priority tasks within high bushfire risk areas prior to the 2018-19 bushfire season. Scheduling and completion of this high priority work was a significant feat, requiring a combined effort by internal and external resources, with support from state and local government and private landowners.

Separately, the increased emphasis in our hazard tree mitigation program resulted in more than 4,200 spans treated for hazard trees during FY2018-19 – a greater than 250 per cent increase, up from approximately 1,700 in FY2017-18.

These combined results reflect the mitigation of significant network and public safety risk associated with vegetation in proximity to our overhead powerlines and are also testament to the substantive effort and commitment of our internal teams and contract service providers.

Essential Water

In Far West of NSW, our operating division Essential Water services a population of approximately 18,000 people in the communities of Broken Hill, Sunset Strip, Menindee and Silverton. It delivers secure water supply to around 10,500 customers, along with reliable sewerage services to around 9,700 customers in Broken Hill, through a network of dams, water treatment plants, sewage treatment plants, reservoirs, water and sewage pumping stations, mains and other related infrastructure.

Homes and businesses connected to the Essential Water network are supplied through approximately 200km of pipelines and mains, and around 91 per cent of the customer base is residential.

Consumption for this group totalled 2,667ML in FY2018-19, up two per cent from 2,722ML in FY2017-18. Raw water customers consumed 442ML, an increase of 32ML (seven per cent) from FY2017-18.

Highlights of Essential Water's FY2018-19 works program included:

- replacement of 1,669m of water reticulation pipeline
- replacement of 378m of sewer main
- relining of 1,280m of sewer main
- cleaning and rodding 23,150m of sewer main.

Drought preparedness

Essential Water's customers have experienced four major droughts in the last 17 years. The first, the Millennium Drought, resulted in high salinity treated water, which although compliant with the Australian Drinking Water Guidelines, was generally unacceptable, of poor aesthetic quality, and resulted in damaged appliances and gardens. Following this drought, in 2010, the Mica Street Water Treatment plant was replaced.

During recent drought events, Menindee Lakes, which provides water when local reservoirs evaporate, reached minimal levels. However, restricted supply has been maintained, due to both State and Federal Government-funded emergency drought projects.

During FY2018-19, with the region still in severe drought, the Murray River to Broken Hill pipeline project was completed, providing a secure and adequate water supply. This supply provides the confidence and security necessary for industry development and allows customers to maintain gardens – an important factor in controlling local lead dust.

The final pumping station for the Murray River to Broken Hill transfer system was gifted to Essential Water to operate and maintain in April 2019. Importantly, the station's 500kVA of solar power enables the energy costs of water transfer to Broken Hill to be offset during the day.

Flow into the Menindee Lakes catchment is currently the worst on record. In the last 12 months, other than emergency storages transferred from the Menindee Lakes, Essential Water's three local reservoirs were empty.

Fortunately for Broken Hill, the Murray River supply from Wentworth began providing beneficial water for Broken Hill following Deputy Premier John Barilaro's 'Turning on the Tap ceremony' on 26 February 2019 at the Mica Street water treatment plant.

At the end of FY2018-19, storage levels were:

- Imperial Lake: 71ML (10 per cent)
- Stephen's Creek Reservoir: 60ML (less than one per cent)
- Umberumberka Reservoir: 364ML (five per cent)
- Menindee Lakes: 15GL (less than one per cent).

Customers at Menindee, Sunset Strip, and along the old Menindee pipeline continue to be supplied from Lake Copi Hollow, the result of WaterNSW's program to transfer water into the lake initially to supply Broken Hill, prior to supply from the NSW Government's Wentworth to Broken Hill Pipeline project.

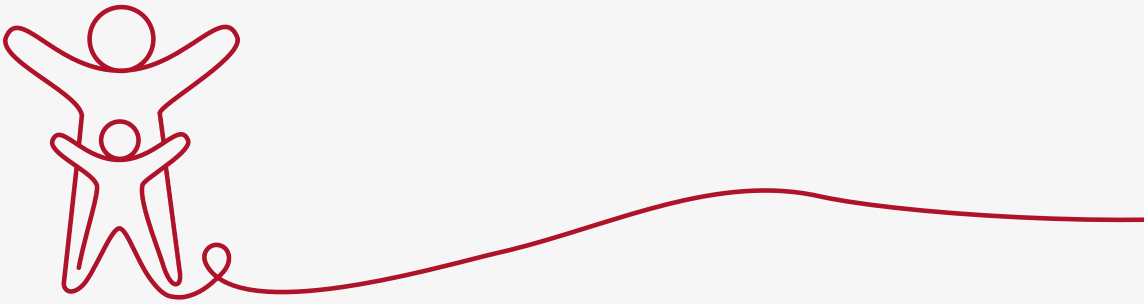
Essential Water performance

Essential Water's earnings before interest and tax (EBIT) was $1.4million against a target loss of $8.5M. This was primarily driven by the lower impairment of assets of $7.1M due to lower than expected capital expenditure. Essential Water recognised Gifted Assets of $59.8M as part of the Wentworth to Broken Hill Pipeline. These assets were fully impaired.

Essential Energy invested $7.9M on water network capital programs in FY2018-19, which was significantly lower than the target of $15.0M, mainly due to deferral of works pending the potential impacts of consequential works due to the construction of the new Wentworth to Broken Hill Pipeline. An additional $9.4M was spent on water network maintenance programs.

Murray River to Broken Hill pipeline pumping station

Our Future



TRANSFORMATION PROGRAM

Over the coming five years, Essential Energy will progress a series of workstreams and initiatives to deliver a better service at lower cost and create a business capable of responding to the rapid changes being experienced in the electricity sector. In total the program will deliver 55 initiatives, improving all parts of the business.

Over the next 18 months we will focus on large programs of work to strengthen our core business. These include Right Work Right Place Right Time, which will provide a longer pipeline of value-add work through aligned inspection programs and data-informed decisions. This will allow field teams to identify and cluster works by geographical areas, schedule works to make every hour of the day count and deliver work in a safe and efficient manner, all while continuously learning from our experiences and improving safety outcomes.

We will also implement Enterprise Resource Planning (ERP), improving the management of our core support functions, including Finance, HR and Procurement, that are required by the business to operate efficiently and effectively.

This work comes on the back of several in-flight projects, many of which have already delivered benefits to the business, with more benefits to come in the first half of FY2019-20.

The introduction of a new Customer Interaction Management System in February 2019 resulted in a 50 per cent decrease of open claims and complaints. The new system improves visibility of customer and stakeholder interactions, allowing conversations, enquiries, requests for services and stakeholder consultations to be recorded in one place, providing an overview for employees.

Another example is the introduction of a new travel and expense solution in May 2019 that is empowering employees to complete travel bookings and credit card reconciliations through an automated and online travel and expense management process, saving everyone time for this common administrative task.

Other initiatives have delivered safety improvements, efficiencies for fleet management, improved cyber security, and efficiencies within our stores.

The program is business-led transformation, with subject matter experts from across the organisation developing and implementing the initiatives, to deliver the efficiencies required to ensure Essential Energy continues to provide sustainable services into the future. We are also investing in our people to ensure we have the right skills, tools, technologies and capabilities to work safely and effectively, while delivering an essential product and service to customers at a sustainable level of cost.

INNOVATIVE TECHNOLOGY TRIALS

Alongside the transformation program, innovative technology trials are continuing, including for stand-alone power systems, network visibility innovations and drone technologies (see Asset inspection drone trials in Our Work), for improved network maintenance, reliability, safety and customer service.

Stand-alone power systems trial

Serving customers in densely forested areas or remote rural locations often comes with lower reliability levels for the customers on these remote lines. The costs can also be significantly higher than the recovered revenue. This is largely due to the high costs of managing vegetation clearance and maintaining and renewing long feeders to areas with low customer density. The aim of the stand-alone power systems trial is to prototype emerging technologies capable of minimising cross-subsidisation and improving reliability for customers in remote locations. The trial also investigates how Essential Energy might replace remote end-of-life assets more cost effectively than traditional network solutions.

With the advent of lower-cost photovoltaic panels and batteries, growing customer advocacy and more industry competition, stand-alone power systems (SAPS) are becoming an increasingly viable solution to provide reliable, affordable energy. Compared with the cost to maintain a traditional distribution network, SAPS can have a lower life-cycle infrastructure cost and offer a practical, sustainable and reliable solution for customers on high cost-to-serve feeders in areas with low connection density.

The site selected for the SAPS prototype is a residence at the end of a 5.5km spur located on the boundaries of the Myall Lakes National Park near Bulahdelah, an area subject to high rainfall and frequent storms. The spur to the residence has only two customer connection points. The spur traverses a P1 bush fire zone through swampy and densely vegetated National Park, with poor vehicle access making fault and emergency responses time-consuming and potentially dangerous.

Networks Renewed virtual power plant trial

Essential Energy is an enabler for renewable energy – to date, more than 150,000 Essential Energy customers have installed rooftop solar. Renewable energy technologies present a significant potential to shift towards sustainable and clean energy sources of electricity whilst also lowering energy cost for customers within the National Electricity Market.

The growth of solar exports introduces challenges around managing a steady supply voltage to customers. Recognising this growing challenge, both Essential Energy and AusNet Services joined the University of Technology Sydney to deliver the Australian Renewable Energy Agency (ARENA) funded project “Networks Renewed”.

Aimed at enabling the continual uptake of solar PV with minimal customer impact, and enabling customer batteries to be central to the solution addressing network voltage challenges at lower cost than traditional network options, the Networks Renewed project tested the potential for modern smart inverters (both solar and battery inverters) to provide voltage management services to the network through dynamic control of both real and reactive power.

The three-year trial subsidised more than 30 customers on a constrained rural feeder in Collombatti, 25km north-west of Kempsey, and used a software platform to allow customers to utilise their solar PV and battery installations to bid into voltage support services for the network.

The trial concluded in March 2019 and saw over 3 per cent improvement in local voltage. Customers were credited for their support. The outcome of the customer centric Networks Renewed trial provided an alternative to traditional network augmentation using a process that benefits customers, Essential Energy and the environment.

Network visibility initiative

Energy customers have always wanted reliable, high quality, reasonably priced power. With the increasing availability and cost effectiveness of distributed energy resources (DER) like solar, wind and batteries, customers are able to take control of their power generation and energy storage while allowing export surplus of energy into the electricity grid. As a result, electricity generation is decentralising to the low-voltage edge of the grid and DER is almost certain to become a key pillar in the National Energy Market.

The low-voltage customer edge of the grid was designed to operate in a satisfactory state without visibility or dynamic operation, it has effectively been a 'set and forget' component of the distribution system for more than a century. This change towards a decentralised system is impacting the traditional distribution network model, where energy follows a traditional linear one-way flow from centralised generation, through transmission, distribution to consumers. Essential Energy is innovating to ensure reliability and efficiency in the operation of a network that has increasing levels of DER.

The Network Visibility project aims to determine the most cost-effective blend of approaches to provide the basic level of network visibility required to enable the customer led decentralisation of the energy system. This visibility will be utilised to more dynamically operate the network, increasing the available hosting capacity for DER while ensuring safety and reliability of the network at a lowest cost.

Evolve project

The Evolve project aims to demonstrate a scalable operational technology that provides actionable visibility of network limits, in order to maximise the opportunity for DER to connect to the network and participate in future markets.

The Evolve project will develop 'operating envelopes' that represent the physical limits of a customer's connection to the electricity system, or in other words 'draw the lines for the footy field' after which point customers can collaborate, export and trade anywhere within the 'field of play'.

The Evolve project includes all Queensland and NSW Distribution Network Service Providers (DNSPs) in association with the Australian National University and leading energy companies, with support from Australian Energy Market Operator (AEMO), CSIRO, NSW Government, Energy Networks Australia and ARENA.

Our **Communities**

ESSENTIAL COMMUNITIES SPONSORSHIP PROGRAM

Essential Energy's Essential Communities program is about empowering local groups who contribute so much to their communities. The aim of this program is to support these community groups across Essential Energy's network area through a range of funding opportunities, including Community Halls, Community Choices and Community Support programs.

Essential Giving program

The Essential Giving program was established as a partnership between the business and its employees – every employee dollar donated to the program through regular pre-tax, payroll deductions, is matched by Essential Energy. In FY2018-19, Essential Energy matched employee giving dollar for dollar, and funds were donated to seven charity partners: Garvan Institute; Variety Children's Charity; Lifeline; Can Assist; Westpac Rescue Helicopter Service; ozED (Australian Ectodermal Dysplasia Support Group); and the Children's Tumour Foundation.

Community Halls program

Essential Energy's Community Halls program gives back to the local halls that make up the social fabric of regional, rural and remote NSW and provide a valued venue for the local services in their surrounding areas. Through the program, eligible halls received $200 towards general maintenance costs. In FY2018-19, more than $56,000 in financial assistance was shared by 283 community halls across the regional, rural and remote communities served by Essential Energy.

Community Choices program

Community Choices was launched in May 2019, with up to $2,000 for organisations nominated for funding by their own community members. Sporting clubs and other community groups were encouraged to nominate their local organisation and voting for eligible organisations was hosted online, resulting in 134 successful recipients.

Buy a Bale

In support of the regional, rural and remote communities we serve, who continue to suffer from drought, $23,420 was donated to Buy a Bale by Essential Energy through the Essential Giving Program. Combined with employee donations, the total donation was $42,621.99, with the money used by Rural Aid to buy hay for farmers struggling with the drought.

Individual donations (dollar matching employee donations)	
Buy a Bale	$23,420.00
Cure Brain Cancer	$500.00
Robert Nicholls Fund	$1,855.00

Essential Giving program (dollar matching employee donations)	$72,385.53

Community Support program (29 donations to local community and sporting groups)	$47,330.00

Community Halls program ($200 donations to 283 community halls)	$56,600.00

Community Choices program (Donations to 134 local community and sporting groups)	$163,750.00

Stakeholder Engagement	
Hastings Sustainability Showcase	$3,300.00
Electrical Engineering Forum	$13,000.00
Energy Users Association of Australia	$30,000.00
The Clontarf Foundation	$20,000.00
The Girls Academy	$20,000.00

Having been treated for a brain tumour 20 years ago, Grafton-based powerline worker Trevor King wanted to give something back, so he's been running his own fundraising to raise an astounding $5200 for the Cure Brain Cancer Foundation. Around 1700 people are diagnosed with brain cancer, and 1200 die from the disease in Australia every year. In Australia, brain cancer kills more children than any other disease, and more people under 40 than any other cancer. Yet very little is known about brain cancer, its causes, or how to treat it. Trevor and his daughter participated in a once-in-a-lifetime 223km trek through Australia's red centre in May on the Trek4Brain Cancer Larapinta Trail. Essential Energy was proud to contribute with a donation of $500 to curebraincancer.org.au through the Essential Giving Program.

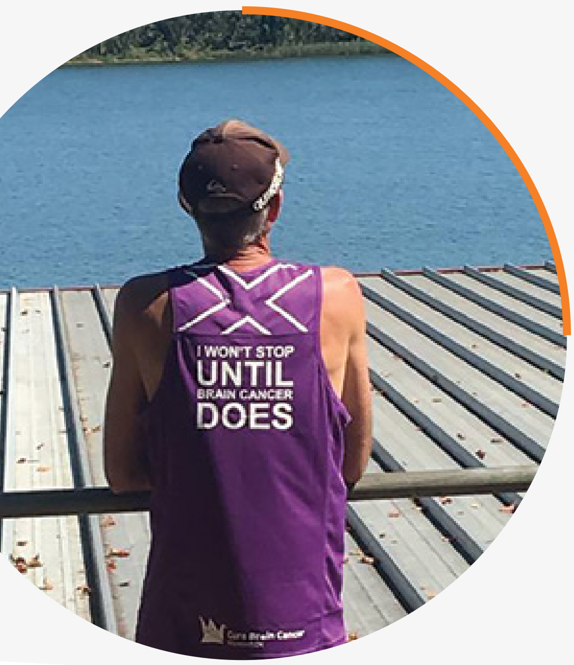
Encouraging students to study Science, Technology, Engineering and Mathematics.

BRAND UNDERSTANDING

In FY2018-19 Essential Energy continued to build on the previous years' successful communications campaign to raise customer awareness of the business' role in the energy supply chain. At completion of this campaign, there was a measurable increase in public understanding of 'who we are' and 'what we do' from 38 per cent to 43 per cent. The benefit of customers understanding who to contact for power outages as opposed to who to contact for billing enquiries translates into cost-to-serve savings as well as increased reputational benefit.

PESAP

Essential Energy's Public Electrical Safety Awareness Plan (PESAP) not only meets our compliance requirements but is a proactive demonstration of Essential Energy's commitment to reduce risks posed by public interaction with our assets. Moving forward, the 12-month, operational PESAP will be delivered online, enabling real-time updates for new initiatives, public education communications and key safety issues.



COMMUNITY RELATIONS

As part of Essential Energy engaging with regional communities across our footprint, we are involved in a range of activities throughout the year around safety, diversity, careers and charitable support for the communities in which we serve. In FY2018-19, this included:

Science and Engineering Challenge

Essential Energy supported the Science and Engineering Challenges in Tamworth and Wagga Wagga in March 2019. More than 1,100 primary and secondary students attended the events and were inspired to study Science, Technology, Engineering and Mathematics (STEM) subjects. Essential Energy employees joined the students, engaging around electrical challenges and assisting the students to think about careers in engineering. The nationwide challenge is an initiative of the University of Newcastle, with valuable support from partners such as Rotary Club.

AgQuip

Essential Energy once again attended AgQuip, which is internationally recognised as Australia's largest primary industry field day. Located at Gunnedah NSW on its own dedicated field day site in the centre of one of the richest and diverse rural areas of Australia, the event attracts attendance from visitors across Australia and overseas – in excess of 100,000 farmers, primary producers, farming families, agricultural industry workers over a three-day period in August each year.

AgQuip provides Essential Energy with the opportunity to show how it is empowering communities by using best practice and new technologies to deliver a safe, reliable and efficient electricity supply. It also provides an opportunity to engage with farm owners and their staff about the importance of electricity safety when living and working on the land.

To highlight how Essential Energy is using new technology, Essential Energy ran a competition at AgQuip 2018 with three drones awarded as prizes.

Primex Field Days

Essential Energy attended the Primex Field Days over three days in March 2019. The event is held in the town of Casino in the lead up to Beef Week and is one of the largest and most diverse primary industry exhibitions in Australia. It attracts approximately 25,000 people over three days. Essential Energy used the event to speak directly with farmers about electrical safety, vegetation management, innovation and Essential Energy's role in the electricity supply chain.

Henty Machinery Field Days

Essential Energy attended the 2018 Henty Machinery Field Days to talk to attendees about the importance of safety when working near the electricity network. Essential Energy held a 'WIN A Drone' competition, with three drones given to prize recipients. Essential Energy drone pilots were also in attendance to show Essential Energy's innovative work in this area. School groups also visited the Essential Energy marquee to learn about our 'Look up and Live' message and 'Ernie Turnie' was kept busy over the three days demonstrating what happens if machinery gets too close to overhead powerlines.

$42,621

donated to Buy a Bale by Essential Energy and employees

in 2018 -19

$56,600

in financial assistance was shared by 283

community halls

Corporate Governance

Governance

Essential Energy is a "State Owned Corporation" established under the *Energy Services Corporations Act 1995 (NSW)* and *the State Owned Corporations Act 1989 (NSW)*. It is governed, principally, by these two statutes and its Constitution. Essential Energy operates within the terms of the *Electricity Supply Act 1995 (NSW)*.

Good governance is a critical prerequisite for a high-performance organisation. It provides a platform for a sustainable future and demonstrates commitment to high standards of business integrity, ethics, and professionalism across all activities.

Essential Energy's Code of Conduct sets out the expectations for employee behaviour that are fundamental to the business's success. The Code encourages a culture of responsibility and accountability that promotes ethical and responsible decision making.

Good governance helps to ensure the delivery of outcomes sought by shareholders; supports people and business operations; and helps ensure Essential Energy adopts sound ethical, financial and risk management practices to benefit customers, and effective compliance and auditing programs.

Board of Directors

The Board is responsible for governance and, ultimately, the performance of the company. It gives direction and exercises judgment in setting the company's strategy and objectives and is responsible for overseeing its implementation. The Chief Executive Officer (CEO) is responsible to the Board for the day-to-day management of the company and leads the Executive Leadership Team (ELT) in delivering the approved strategy and achieving the performance targets set by the Board.

The Board operates in accordance with its Charter, which provides an overarching statement of authority and accountability for governance and management of Essential Energy, consistent with the Constitution, applicable legislation, Government policy and Essential Energy's Code of Conduct.

All directors on the Board of Essential Energy (with the exception of the CEO) are appointed by the voting shareholders (the New South Wales Treasurer and Minister for Finance and Small Business). Appointments may be renewed by the voting shareholders, who may appoint other directors at their discretion. Each non-executive director's remuneration is determined by the voting shareholders and is paid out of Essential Energy's funds. The CEO is not entitled to additional remuneration for being an executive director.

Conflicts of interest

To ensure their independent status, all directors of Essential Energy are subject to the statutory duties and prohibitions regarding conflicts of interest. Directors identify and disclose issues which may give rise to any conflict of interest. The Company Secretary maintains the Register of Interests which is reviewed at Board meetings, so that the information held is up to date.

Board committees

The role of the Board is to provide strategic guidance and effective oversight of management. In undertaking this role, the Board has established three committees as shown below. Each Committee acts in accordance with a charter approved by the Board setting out matters relevant to the composition, responsibilities, authority and reporting of the Committee.

Audit and Risk Committee

The Audit and Risk Committee meets at least four times per year. The Committee's responsibilities cover matters relating to the financial affairs and business risks of Essential Energy, internal and external audits, risk management, compliance, governance practices, and fraud prevention. In addition, the Committee examines any other matters referred to it by the Board.

Board Regulatory Committee

The Board Regulatory Committee meets at least four times per year. The Committee assists the Board in fulfilling its responsibilities regarding managing regulatory risk, and its oversight of regulatory strategy and compliance for regulatory proposals and submissions. In addition, the Committee examines any other matters referred to it by the Board.

Rosemary Sinclair, CEO of Energy Consumers Australia is an independent advisor to the Committee. Euan Morton, Principal at Synergies Economic Consulting was an independent advisor to the Committee up until 31 December 2018.

Safety, Human Resources and Environment Committee

The Safety, Human Resources and Environment Committee meets at least four times per year. The Committee assists the Board in fulfilling its responsibilities regarding work health and safety and environmental practices, and to discharge the Board's responsibilities of oversight and corporate governance in relation to human resources matters. In addition, the Committee examines any other matters referred to it by the Board.

Organisation structure as at 30 June 2019

Board of Directors

Chief Executive Officer

John Cleland

General Manager Strategy, Regulation and Corporate Affairs	Chief Human Resources Officer	General Manger Customer and Network Services	Chief Financial Officer	Executive Manager Engineering	Acting Chief Information Officer	General Counsel and Company Secretary	Interim Transformation Director
Chantelle Bramley	**Bryce Dyer**	**Luke Jenner**	**Justin Hillier**	**David Salisbury**	**Sarah McCullough**	**Michael Bowan**	**Rob Bridge**
Corporate Affairs	Health, Safety and Environment	Business Change Management	Business Change Management	Asset Engineering	Enterprise Management	Internal Audit	Transformation
Commercial Development	Human Resources and Employee Relations	Customer Services	Commercial Strategy	Business Change Management	Field and Assets eTech	Legal	
Corporate Strategy	Operational Excellence	Network Delivery	Financial Management	Commercial Services and Accredited Service Providers	Planning and Security	Governance	
Regulatory Affairs	Workforce Planning	Regional Operations	Financial Transactions and Services	Network Design	Automation and Human Experience	Property Services	
Stakeholder Engagement		Water Operations	Fleet	Network Intelligence	IT Vendor and Service Management	Risk and Compliance	
			Procurement	Network Investment Delivery	Telecommunications		
				Network Optimisation			
				Network Strategy and Risk			
				System Control			

Director's remuneration

Under the *State Owned Corporations Act 1989,* the voting shareholders determine the remuneration of State Owned Corporation Chairs and directors. At the Premier's request, the Statutory and Other Offices Remuneration Tribunal ("SOORT") recommends such remuneration as set out in the table below, which is based on the SOORT 2007 determination. The fee amounts have been unchanged since 1 July 2016.

Chair/Member Subcommittee Remuneration	Annual Fee
Board Chair	$106,900
Director [1]	$60,600
Chair, Audit and Risk Committee [2]	$7,460
Members, Audit and Risk Committee [2]	$5,330
Chairs, Other Committees [2]	$5,330
Members, Other Committees [2]	$3,000

1) Base fee
2) Additional fee

Essential Energy Board of Directors

Robyn Clubb
BEc CA FFin MAICD

Interim Chair

(Appointed 20 June 2019 for a period of 12 months or until the permanent appointment of a Chair)

Commenced: 15 March 2018
Current Term: 15 March 2018 – 14 March 2021

- Member, Audit and Risk Committee

Other Directorships

- Australian Wool Exchange Ltd, Chair
- Craig Mostyn Group Ltd, director
- Elders Limited, director
- Pro Ten Limited, director
- Rice Marketing Board for the State of NSW, director

Jennifer Douglas
BSc LLB LLM MBA GAICD

Non-Executive Director

Commenced: 15 March 2018
Current Term: 15 March 2018 – 14 March 2021

- Chair, Board Regulatory Committee (Appointed as the Chair, effective 1 May 2019)
- Member, Audit and Risk Committee (Appointed as a member, effective 1 May 2019)
- Member, Safety, Human Resources and Environment Committee

Other Directorships

- Hansen Technologies Limited, director
- Opticomm Pty Ltd, director
- Peter MacCullum Cancer Foundation, director

John Fletcher
BSc MBA

Non-Executive Director

Commenced: 13 October 2016
Current Term: 13 October 2016 – 12 October 2019

Essential Energy was notified by its Shareholding Ministers on 2 October that Mr Fletcher has been reappointed for a further three year term from 13 October 2019 – 23 October 2022

- Chair, Audit and Risk Committee
- Member, Board Regulatory Committee

Other Directorships

Nil

Philip Garling
B.Build FAIB FAICD, FIE (Aust)

Non-Executive Director

Commenced: 1 January 2013
Current Term: 1 January 2016 – 31 December 2019

- Chair, Safety, Human Resources and Environment Committee

Other Directorships

- Charter Hall Funds Management Limited, director
- Charter Hall Limited, director
- Downer EDI Limited, director
- Energy Queensland Limited, Chair
- Newcastle Coal Infrastructure Group, Chair
- Tellus Holdings Limited, Chair

Patrick Strange
PhD BE (Hons)

Non-Executive Director

Commenced: 25 November 2013
Current Term: 25 November 2016 – 24 November 2019

Member, Safety, Human Resources and Environment Committee

Other Directorships

- Auckland International Airport Limited, Chair
- Chorus Limited, Chair
- Mercury Energy, director

Patricia McKenzie
LLB FAICD

Chair

Commenced: 14 April 2016
Current Term: 15 February 2019 – 14 February 2022
Resigned: 30 April 2019

- Chair of the Board
- Chair of the Board Regulatory Committee
- Member, Audit and Risk Committee
- Member, Safety, Human Resources and Environment Committee

John Cleland
BEc DipFinMan CA FFin GAICD

CEO and Executive Director

Commenced: 18 July 2016

- Member, Board Regulatory Committee
- Attendee, Audit and Risk Committee
- Attendee, Safety, Human Resources and Environment Committee

Other Directorships

- CEO Council of the Energy Charter, Chair
- Energy Networks Australia, director

Board and Board Committee meetings held in FY2018–19

1 July 2018–30 June 2019 Directors' Attendance Schedule

	Essential Energy Board of Directors' Meetings		Audit and Risk Committee [1]		Board Regulatory Committee [2]		Safety, Human Resources and Environment Committee	
Director [3]	A	B	A	B	A	B	A	B
P McKenzie [4]	9	9	4	4	3	3	3	3
J Cleland	11	11	5	5	4	4	4	4
R Clubb [5]	11	9	5	4	—	3	—	1
J Douglas [6]	11	11	1	1	4	4	4	4
J Fletcher	11	11	5	5	4	4	—	1
P Garling	11	9	—	—	—	—	4	4
P Strange	11	9	—	1	—	1	4	3

Notes:

A. Indicates number of meetings held during the period the director was entitled to attend.

B. Indicates the number of meetings attended by the director during the period.

1) The CEO attends the Audit and Risk Committee ("ARC") and Safety, Human Resources and Environment ("SHRE") Committee
2) The CEO is a member of the Board Regulatory Committee
3) All directors have the right to attend all Committee meetings, as per the Committee Charters, except when the Committee Chair determines a conflict of interest in relation to matters to be discussed by the Committee
4) Patricia McKenzie resigned from Essential Energy's Board, effective 30 April 2019
5) Robyn Clubb was selected by the Board to act as the Chair from 1 May 2019 and appointed by the Shareholders as Interim Chair, effective 20 June 2019
6) Jennifer Douglas was appointed as Chair of the Board Regulatory Committee and a member of the Audit and Risk Committee, effective 1 May 2019

Indemnity and insurance

Under the NSW Treasury Commercial Policy Framework, section 7 of *TPP18-04 Directors and Officers Indemnity Policy for State Owned Corporations provides that State Owned Corporations* must disclose indemnity and insurance details for directors and officers in their Annual Reports.

During the financial year, no new indemnities were granted to directors of Essential Energy. Each director remained indemnified by Essential Energy to the extent permitted under their existing indemnities.

Essential Energy maintains Directors' and Officers' insurance cover in relation to legal liabilities that may be incurred by its directors and senior officers.

Essential Energy's Executive Leadership Team at 30 June 2019

The management of Essential Energy is led by an Executive Leadership Team (ELT) which includes the CEO, Chief Financial Officer, General Managers from key operational areas and the General Counsel and Company Secretary.

The CEO has the authority and responsibility for managing Essential Energy in accordance with the strategy, plans, practices, and policies approved by the Board to achieve agreed objectives. In doing so, the CEO is accountable to the Board for the governance of the operations of the company, delivery of the agreed strategy and reform initiatives, and leads the ELT.

The ELT provides governance and oversight for matters of significance in relation to policy, strategy, and governance frameworks for Essential Energy.

Essential Energy's Executive Leadership Team at 30 June 2019

John Cleland
BEc DipFinMan
CA FFin GAICD

Chief Executive Officer

Michael Bowan
BA LIB (Hons)

General Counsel and Company Secretary

Chantelle Bramley
BEc (Hons) MSc
LLM

General Manager Strategy, Regulation and Corporate Affairs

Bryce Dyer
BA (Hons), Dip Bus
Admin, MAHRI

Chief Human Resources Officer

Rob Bridge
BSc aeg

Interim Transformation Director

Justin Hillier
BBus CA
GDipAppFinInv
FINSIA

Chief Financial Officer

Luke Jenner
BE (Hons) EMBA
MAICD

General Manager Customer and Network Services

Sarah McCullough
GradCertMgt
(InfoTech),
MBA(Comp)

Acting Chief Information Officer

David Salisbury
BEng (Hons) CPEng
EngExec FIEAust

Executive Manager Engineering

General principles for remuneration of Executive Officers

Essential Energy's remuneration strategies are designed to attract and retain Senior Managers who drive business performance and who consistently demonstrate high standards of behaviour in line with Essential Energy's values and Code of Conduct.

Components of remuneration

At 30 June 2019, Essential Energy's Senior Managers were employed on individual, performance-based employment contracts. Total remuneration for Senior Managers on performance-based employment contracts consists of fixed remuneration (the annual salary paid inclusive of superannuation contributions and all salary sacrificed benefits) and an annual 'short-term incentive' payment that represents the variable component of total remuneration for each Senior Manager.

Fixed remuneration

As a condition of employment, fixed remuneration of Senior Managers is reviewed in line with market trends annually in July and is based on rigorous performance assessments of each Senior Manager.

In approving increases to the fixed remuneration of Senior Managers, the Board considers the NSW State Wages Policy and outcomes of performance assessments.

Annual Short-term incentive payment

Annual Short-term Incentive Payments are made to eligible Senior Managers on the basis of both individual and organisational performance assessed against pre-agreed measures and targets aligned to Essential Energy's Corporate Plan and Statement of Corporate Intent (SCI).

Eligibility is contingent on a rigorous assessment of leadership performance and achievement of business targets for each manager during the course of the year. The Board reviews the performance assessments and approves all annual performance payments for the CEO. The remaining Senior Managers are reviewed by either the CEO or relevant General Manager.

Senior Manager remuneration

All Senior Managers have their fixed remuneration reviewed in July each year. A 1.82[1] per cent average increase was implemented from 1 July 2018.

Senior Managers accounted for 7.0 per cent of Essential Energy's employee related expenditure in FY2018-19, compared with 7.7 per cent in FY2017-18[2].

Executive remuneration FY2018-19

Name	Position at 30 June 2019	Annual Remuneration (excl. Short-term Incentive) at 30 June 19	Short-term Incentive FY 2018-19[3]	Annual Remuneration (excl. Short-term Incentive) at 30 June 18	Short-Term Incentive FY 2017-18
John Cleland	Chief Executive Officer	$783,305	$144,520	$764,200	$102,021
Michael Bowan	General Counsel & Company Secretary	$369,154	$58,372	$358,750	$55,264
Chantelle Bramley	General Manager Strategy, Regulation and Corporate Affairs[4]	$366,994	$54,820	$350,000	$24,740
Justin Hillier	Chief Financial Officer	$380,070	$63,424	$369,000	$52,718
Luke Jenner	General Manager Customer and Network Services	$398,719	$69,776	$377,400	$51,354
Bryce Dyer	Chief Human Resources Officer[5]	$350,000	$0	-	-
David Salisbury	Executive Manager Engineering	$411,000	$61,136	$400,000	$42,115
Rob Bridge	Interim Transformation Director	$425,000	$67,203	-	-
Sarah McCullough	Acting Chief Information Officer[6]	$270,000	$15,314	-	-

1) All employees on an individual employment contract as at 1 July 2018.
2) FY2018-19 senior manager expenditure has been re-stated to exclude non-senior manager employee related expenditure and to exclude staff related costs including redundancy expenses and the impact of the movement in bond rates.
3) "Short-term incentive" payments are based on FY2018-19 performance against key criteria, approved by the Board in August 2019 and paid in FY2019-20.
4) Responsible for the stakeholder engagement portfolio.
5) Hired 6 August 2018, the CHRO replaced the GM Safety, HR & Environment position.
6) Acting Chief Information Officer from 15 April 2019. The CIO position was vacant at 30 June 2018, filled by an external contractor whilst recruitment was in progress. Rob Bridge was appointed Chief Information Officer on 1 July 2018 and transferred to the Program Director Transformation position on 14 April 2019.

Senior Managers

	2017–18		2018–19	
Band[1]	Female	Male	Female	Male
Above Band 4[2]		1		1
Band 4				1
Band 3	1	8	1	7
Band 2	3	8	6	10
Band 1	25	106	27	103
Totals	29	123	34	122

		Average Remuneration	
Band	Band	2017/18 $[3]	2018/19 $[4]
Above Band 4	$548,951+	$901,756	$927,825
Band 4	$475,151 - $548,950		$492,203
Band 3	$337,101 - $475,150	$407,873	$418,571
Band 2	$268,001 - $337,100	$279,157	$293,019
Band 1	$187,900 - $268,000	$208,788	$213,097

1) Bands are as defined in the Public Service Senior Executive Annual Determination dated 7 August 2018 under the Government Sector Employment Act 2013. Reporting is limited to managers employed on individual employment contracts.
2) Includes managers on individual contracts receiving remuneration at levels above Band 4.
3) Average remuneration is based on Full Time Equivalent (FTE) Fixed Annual Remuneration (FAR) as at 30 June 2018, 60 per cent of the maximum short-term incentive payment for eligible employees calculated on FTE FAR and car allowance, if applicable.
4) Average remuneration reported from 2018/19 has been updated to provide Full Time Equivalent (FTE) Fixed Annual Remuneration (FAR) as at 30 June 2019, FY2018-19 short-term incentive payment based on FY2018-19 performance against key criteria, paid in FY2019-20 for eligible employees and car allowance, where applicable.

Changes to Essential Energy's Senior Managers and Senior Manager Remuneration

At the end of the reporting period, Essential Energy employed 156 officers who received a total remuneration package in accord with NSW Senior Executive Service bands. This represents an increase of 4 officers compared to the previous financial year. The increase was mainly due to the recruitment of new senior leader positions following significant organisational change.

The number of female employees receiving a total remuneration package of SES1 or above, was 34.

Code of conduct

Essential Energy's *Code of Conduct* sets out the corporate values and behaviours expected of employees. Supporting the Code is the *Statement of Business Ethics,* which sets out the business principles for Essential Energy's dealings with suppliers. Both documents are available online at essentialenergy.com.au.

Continued communications via internal publications provide employees with an understanding of ethical behaviour, their obligations and rights in reporting behaviour that is not in keeping with Essential Energy's *Code of Conduct,* and of the protections available to them if their report is assessed to be a Public Interest Disclosure pursuant to the *Public Interest Disclosures Act 1994*. This encourages a positive reporting culture and a workforce that is well educated on behavioural and ethical expectations.

Summary of 'if not, why not' reporting

The *NSW Treasury Commercial Policy Framework: Guidelines for Governing Boards of Government Businesses TPP17-10* includes recommendations for corporate governance, and a requirement for 'if not, why not' reporting where these recommendations have not been adopted.

Essential Energy reviews its practices to ensure that these recommendations are adopted, or appropriate alternative governance arrangements are in place to support the principles in these guidelines. A summary 'if not, why not' report outlining areas where alternative governance arrangements are in place is provided below.

Recommendation	Alternative Governance Arrangement
Principle 2: Structure the Board to add value Have a Board Nomination committee with at least three members, a majority of whom are independent directors, an independent Chair and a Committee Charter.	The Board as a whole carries out the duties that would otherwise be performed by a Nomination Committee, including making recommendations relating to director appointments and reappointments, and developing and maintaining Board succession plans.

Risk management

Essential Energy's *Risk Management Framework* is designed to meet stakeholder expectations for a safe, affordable and reliable electricity supply.

Essential Energy's risk management principles are designed to:

- provide a healthy and safe environment for employees and for the public
- promote a culture which empowers employees to effectively manage safety risks
- provide affordable and reliable electricity to customers through continuous improvement in operations, prioritising allocation of resources to activities that deliver the greatest value
- manage reliability risks through planning
- empower employees to achieve organisational objectives and to attract, retain and develop qualified and commercially capable people
- manage operations and partner with stakeholders to protect and enhance the environment
- develop objectives and plans in response to opportunities and risks in the environment
- embed appropriate governance and monitoring to support the delivery of benefits from initiatives and change programs
- comply with obligations and ensure timely and appropriate action plans are in place to support known regulatory changes or in response to actual or potential compliance and regulatory issues
- proactively engage with stakeholders including customers, the community, suppliers, government and regulators to ensure the business' priorities appropriately balance stakeholder expectations and concerns
- maintain appropriate controls and reporting to support sound financial management and stewardship of resources and satisfactory returns for shareholders.

Essential Energy's risk management practices are aligned to the *NSW Treasury's Risk Management Toolkit for NSW Public Sector Agencies,* the *Audit Office of NSW Governance Lighthouse Model* and *AS/NZS ISO 31000:2009 – Risk Management – Principles and Guidelines.*

The *Risk Management Framework* is being progressively linked to the *Asset Management System.* By way of example, Essential Energy has matured the Asset Risk Management and Value Frameworks, improved the ability to quantify risks, introduced a risk-informed investment decision optimisation tool and implemented a pilot to increase the granularity of risk information used to prioritise rectification of asset defects.

Business risk categories

Safety	Fatality/serious injury of employee or member of public
Network	Significant customer impact related to network reliability
Customer	Significant customer impact related to other customer service targets
Finance	Significant unbudgeted financial loss
Compliance	Liability associated with a dispute or material breach of legislation or licence
Reputation	Sustained public criticism of Essential Energy
Environment	Significant environmental incident
People	Failure to deliver performance through people
Strategy	Strategic objectives are not delivered, and business opportunities are lost
ICT	Significant ICT system failure

Incident management and business continuity

Essential Energy is committed to maintaining continuity of supply and business functions during network-related and other events.

In line with better practice, Essential Energy has adopted an all-hazards approach to business continuity, where functional plans (such as business continuity plans, network incident plans and ICT incident plans) are designed to work together, adapt and scale to respond to an unwanted event.

Essential Energy's *Business Continuity Management Framework (BCMF)* is aligned to *ISO 22313 – Societal security – Business continuity management systems* and is a key control for business risk categories including Safety, Network, Customer, Reputation and ICT. The BCMF Plan sets out activities that must take place on a periodic basis to govern, improve and maintain the business's incident management capability.

Insurance

Essential Energy reviews the adequacy of insurance policy coverage and limits annually, as a key control for the 'Finance' business risk category. All participating insurers must meet acceptable financial security requirements. Management processes are in place to ensure effective governance of claims.

Compliance

Essential Energy's Compliance Management Plan (CMP) is aligned to the *International Standard ISO 19600:2015 Compliance Management Systems – Guidelines* as well as the *Audit Office of NSW Governance Lighthouse – Strategic Early Warning System* and is a key control for the business risk category 'Compliance'. The CMP documents Essential Energy's approach to compliance management and the minimisation of the risk of non-compliance.

Fraud and corruption management

The Essential Energy *Fraud and Corruption Control Plan* (FCCP) is a key control for business risk categories including Finance, Compliance and Reputation and sets out the key initiatives for fraud control activities at Essential Energy. These activities are linked to areas of high risk of significant impact as identified in Essential Energy's *Fraud Risk Register.* The FCCP applies to all employees and any other person undertaking work in the company.

Public Interest Disclosures

In compliance with the *Public Interest Disclosures Act 1994 (PID Act),* Essential Energy has a policy for receiving, assessing, and investigating Public Interest Disclosures (PIDs).

Employees were informed of the contents of the policy and the protection available under the PID Act through the regular publication of information about Essential Energy's reporting processes.

During FY2018–19, Essential Energy received 17 complaints in relation to corrupt conduct and assessed these as PIDs under the PID Act. No PIDs were made under a statutory or other legal obligation. There were no PIDs received in relation to government information contravention, serious and substantial waste of public money or maladministration. Essential Energy finalised 11 PIDs during the financial year.

Internal Audit

The Board and ELT are committed to ensuring the independence and effectiveness of the internal audit function.

Internal audits increase management's understanding of, and confidence in, Essential Energy's ability to achieve its objectives by adopting a risk-based approach to evaluating controls and improving processes.

During the year, Essential Energy completed 48 internal audits across the organisation, with suitable actions implemented to address key issues identified.

The Audit and Risk Committee review and approve the outcomes of internal audit activity.

External Audit

The NSW Auditor-General provides independent external audit services through the NSW Audit Office.

The Auditor-General does not provide other services to Essential Energy.

The Audit and Risk Committee reviews the NSW Audit Office Annual Engagement Plan, issues raised in the Engagement Closing Report and Management Letter and the results of the annual audit of financial statements.

Finance Report

Key financial measures	2017–18 result	2018–19 result	2018–19 SCI	Variation to prior year	Variation to SCI &
Network revenue ($M) *	1,268.8	**1,287.7**	**1,277.4**	18.9	10.3
Operating Costs ($M)	440.5	**506.6**	**471.1**	66.1	35.5
Earnings before interest, tax, depreciation & amortisation (EBITDA) ($M)	693.6	**777.0**	**739.4**	83.4	37.6
Earnings before interest and tax (EBIT) ($M)	323.1	**338.7**	**354.5**	15.6	(15.8)
Operating profit (loss) before tax ($M)	(16.5)	**4.1**	**9.0**	20.6	(4.9)
Operating profit (loss) after tax ($M)	(11.6)	**2.8**	**6.3**	14.4	(3.5)
Total Distribution ($M) (Dividend + current income tax expense + government guarantee fee)	128.1	**166.2**	**147.8**	38.1	18.4
Return on capital employed (per cent) ^	4.2%	**4.3%**	**4.5%**	0.1%	(0.2%)
Return on assets (per cent) ^	3.8%	**4.0%**	**4.1%**	0.2%	(0.1%)
Return on equity (per cent) ^	(0.5%)	**0.1%**	**0.3%**	0.6%	(0.2%)
Capital Expenditure ($M) #	399.8	**482.8**	**521.3**	85.4	(38.5)
Gearing (per cent) @	69.4%	**70.1%**	**70.2%**	0.7%	(0.1%)

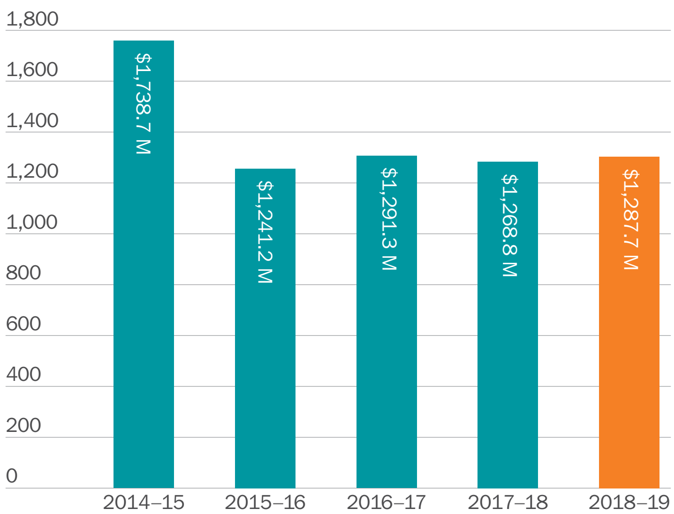
& SCI – Statement of Corporate Intent
* Network Revenue comprises electricity distribution revenue and water revenue.
^ Ratios include customer contributions (including gifted assets).
# Capital Expenditure excludes gifted and granted assets.
@ Gearing is the percentage of net debt to total capital.

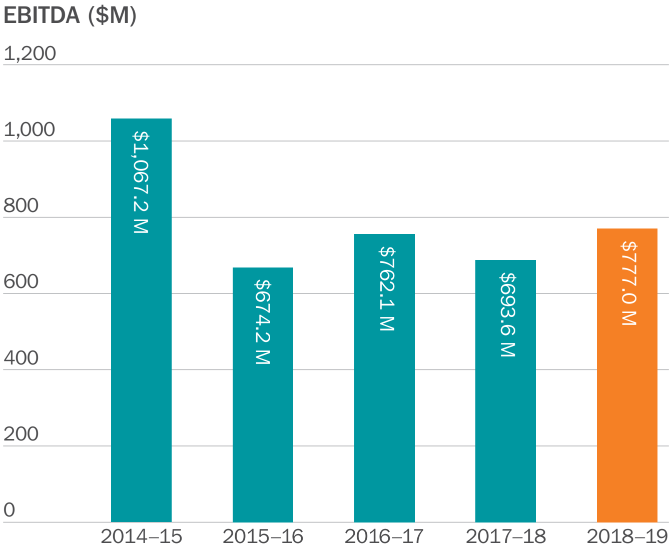
Performance against prior year

An $18.9M (1.5 per cent) increase in network revenue from the prior year was mainly due to inflationary increases in tariffs.

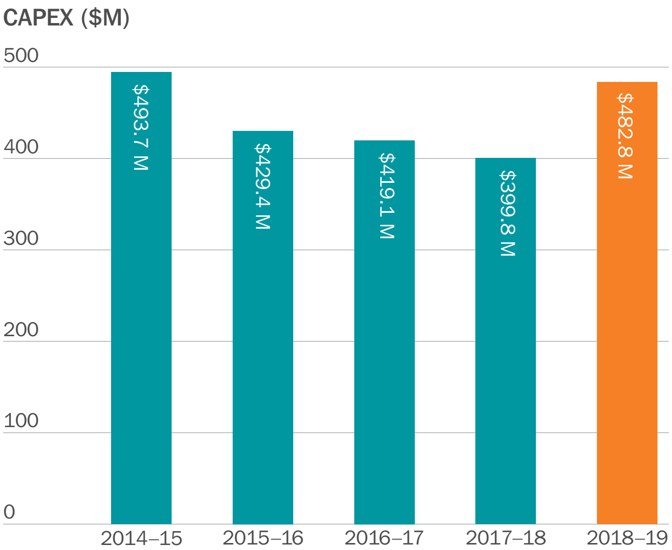
An $83.4M increase in EBITDA against the prior year mainly reflects higher total revenue of $141.7M, which included higher government grant revenue of $67.7M and higher capital contributions revenue of $54.2. This was partly offset by an increase in operating costs ($66.1M) including increased transformation activity and vegetation management costs. Depreciation, amortisation and impairment increased by $67.8M mainly due to the impairment of granted assets relating to the water business. This resulted in a $2.8M profit after tax being returned for FY2018–19.

Network Revenue ($M)





A $85.4M increase in capital expenditure against the prior year was mainly due to an increase in the network capital program and increased replacement of fleet.



Debt

Total debt increased by $168.8M over the year, mainly to fund the capital expenditure program. The gearing ratio, calculated as debt divided by debt plus equity, increased marginally from 69.4 per cent to 70.1 per cent. We aim to achieve a 10-year trailing average portfolio, accordingly over 90 per cent of our debt is non-current.

Shareholder return

Return on capital employed, return on assets and return on equity all increased marginally over FY2018–19 returns due to higher EBITDA. Returns remain below long-term targets as Essential Energy continues to invest in transformation initiatives.

Essential Energy's distributions to the NSW Government for 2018 were $166.2M compared to $128.1M in FY2017–18, consisting of current income tax expense of $66.9M and government guarantee fee on debt of $99.3M. No dividend was paid or provided for FY2018–19.

Performance against SCI

Essential Energy is required by legislation to submit a Statement of Corporate Intent (SCI) to the shareholders. The SCI encompasses the budget and represents the performance agreement between Essential Energy and its shareholders, outlining its objectives and defining its obligations to shareholders.

A key focus for Essential Energy is on achieving best practice levels of efficiency to deliver real reductions in network charges and to work towards achieving a satisfactory return on capital employed.

The lower than budget profit result reflects higher operating costs of $35.5M, including higher labour costs (mainly the impact of a lower bond rate on long service leave provisions), transformation initiatives, and the establishment of a provision to rectify certain metering configuration arrangements. This was partly offset by higher total network revenue of $10.3M, other revenue from contracts with customers of $8.4M, and lower than expected finance costs of $10.7M primarily due to lower than budgeted debt and interest rates.

Financial Statements

For the year ended 30 June 2019

INDEPENDENT AUDITOR'S REPORT

Essential Energy

To Members of the New South Wales Parliament

Opinion

I have audited the accompanying financial statements of Essential Energy (the Corporation), which comprise the Statement of Comprehensive Income for the year ended 30 June 2019, the Statement of Financial Position as at 30 June 2019, the Statement of Changes in Equity and the Statement of Cash Flows for the year then ended, notes comprising a summary of significant accounting policies and other explanatory information.

In my opinion, the financial statements:

- give a true and fair view of the financial position of the Corporation as at 30 June 2019, and of its financial performance and its cash flows for the year then ended in accordance with Australian Accounting Standards
- are in accordance with section 41B of the *Public Finance and Audit Act 1983* (PF&A Act) and the Public Finance and Audit Regulation 2015
- comply with International Financial Reporting Standards as disclosed in Note 1 'Basis of preparation'.

My opinion should be read in conjunction with the rest of this report.

Basis for Opinion

I conducted my audit in accordance with Australian Auditing Standards. My responsibilities under the standards are described in the 'Auditor's Responsibilities for the Audit of the Financial Statements' section of my report.

I am independent of the Corporation in accordance with the requirements of the:

- Australian Auditing Standards
- Accounting Professional and Ethical Standards Board's APES 110 'Code of Ethics for Professional Accountants' (APES 110).

I have fulfilled my other ethical responsibilities in accordance with APES 110.

Parliament promotes independence by ensuring the Auditor-General and the Audit Office of New South Wales are not compromised in their roles by:

- providing that only Parliament, and not the executive government, can remove an Auditor-General
- mandating the Auditor-General as auditor of public sector agencies
- precluding the Auditor-General from providing non-audit services.

I believe the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

Level 19, Darling Park Tower 2, 201 Sussex Street, Sydney NSW 2000
GPO Box 12, Sydney NSW 2001 | t 02 9275 7101 | f 02 9275 7179 | mail@audit.nsw.gov.au | audit.nsw.gov.au

Other Information

The Corporation's annual report for the year ended 30 June 2019 includes other information in addition to the financial statements and my Independent Auditor's Report thereon. The directors of the Corporation are responsible for the other information. At the date of this Independent Auditor's Report, the other information I have received comprise the Statement given by Directors.

My opinion on the financial statements does not cover the other information. Accordingly, I do not express any form of assurance conclusion on the other information.

In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work I have performed, I conclude there is a material misstatement of the other information, I must report that fact.

I have nothing to report in this regard.

Director's Responsibilities for the Financial Statements

The directors are responsible for the preparation and fair presentation of the financial statements in accordance with Australian Accounting Standards, the PF&A Act and the *State Owned Corporations Act 1989*, and for such internal control as the directors determine is necessary to enable the preparation and fair presentation of the financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Corporation's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Corporation or to cease operations or have no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Statements

My objectives are to:

- obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error
- issue an Independent Auditor's Report including my opinion.

Reasonable assurance is a high level of assurance, but does not guarantee an audit conducted in accordance with Australian Auditing Standards will always detect material misstatements. Misstatements can arise from fraud or error. Misstatements are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions users take based on the financial statements.

A description of my responsibilities for the audit of the financial statements is located at the Auditing and Assurance Standards Board website at: www.auasb.gov.au/auditors_responsibilities/ar4.pdf. The description forms part of my auditor's report.

My opinion does not provide assurance:

- that the Corporation carried out its activities effectively, efficiently and economically
- about the security and controls over the electronic publication of the audited financial statements on any website where they may be presented
- about any other information which may have been hyperlinked to/from the financial statements.

Caroline Karakatsanis
Director, Financial Audit Services

Delegate of the Auditor-General for New South Wales

12 September 2019
SYDNEY

Statement by Directors

For the year ended 30 June 2019

Pursuant to Section 41C of the *Public Finance and Audit Act 1983*, we state that in the opinion of the directors of Essential Energy:

a. The accompanying financial statements are general purpose financial statements which have been prepared in accordance with Australian Accounting Standards (AASBs) (including Australian Accounting interpretations adopted by the Australian Accounting Standards Board), requirements of the *Public Finance and Audit Act 1983*, the *Public Finance and Audit Regulation 2015* and the *State Owned Corporations Act 1989*. The financial statements of the Corporation also comply with International Financial Reporting Standards (IFRSs) and interpretations adopted by the International Accounting Standards Board and give a true and fair view of the financial position of the Corporation as at 30 June 2019 and its financial performance for the year ended on that date;

b. At the date of this statement, there are reasonable grounds to believe that the Corporation will be able to pay its debts as and when they become due and payable; and

c. We are not aware of any circumstances at the date of this statement that would render any particulars included in the financial statements to be misleading or inaccurate.

This declaration is made in accordance with a resolution of the Board.

John Cleland
Chief Executive Officer

Dated: 10 September 2019

Robyn Clubb
Chair

10 September 2019

Statement of Comprehensive Income

For the year ended 30 June 2019

	Notes	2019 $M	2018 $M
Profit or loss			
Network revenue from contracts with customers	2(a)	**1,287.7**	1,268.8
Other revenue from contracts with customers	2(b)	**222.6**	167.5
Total revenue from contracts with customers		**1,510.3**	1,436.3
Other revenue	2(c)	**68.9**	1.2
Total revenue		**1,579.2**	1,437.5
Operating expenses	3(a)	**(802.2)**	(743.9)
Earnings before interest, taxation, depreciation and amortisation (EBITDA)		**777.0**	693.6
Depreciation, amortisation and impairment	3(b)	**(438.3)**	(370.5)
Earnings before interest and taxation (EBIT)		**338.7**	323.1
Finance costs	3(c)	**(334.6)**	(339.6)
Profit/ (loss) before income tax		**4.1**	(16.5)
Income tax (expense)/ benefit	4(a)	**(1.3)**	4.9
Profit/ (loss) for the year		**2.8**	(11.6)
Other comprehensive income			
Items that will not be reclassified subsequently to profit or loss			
Actuarial (losses)/ gains on remeasurement of superannuation defined benefits	22(f)	**(19.3)**	45.0
Tax benefit/ (expense)	4(b)	**5.8**	(13.5)
		(13.5)	31.5
Items that will be reclassified subsequently to profit or loss			
Gains on cash flow hedges		**0.5**	0.5
Tax expense	4(b)	**(0.2)**	(0.2)
		0.3	0.3
Total other comprehensive (loss)/ income for the year		**(13.2)**	31.8
Total comprehensive (loss)/ income for the year		**(10.4)**	20.2

The accompanying notes form part of these financial statements

Statement of Financial Position

As at 30 June 2019

	Notes	2019 $M	2018 $M
Assets			
Current assets			
Cash at bank		**0.3**	0.4
Trade and other receivables	5	**248.5**	249.2
Inventories		**31.6**	25.6
Total current assets		**280.4**	275.2
Non-current assets			
Trade and other receivables		**1.1**	0.8
Property, plant and equipment	6	**8,188.8**	8,008.1
Intangible assets	7	**198.1**	185.8
Other non-current assets		**0.4**	0.4
Total non-current assets		**8,388.4**	8,195.1
Total assets		**8,668.8**	8,470.3
Liabilities			
Current liabilities			
Trade and other payables	8	**275.1**	253.7
Contract liabilities	9	**7.3**	11.4
Interest bearing liabilities	10	**404.6**	326.1
Current tax liabilities		**37.8**	9.1
Provisions	11	**190.4**	169.8
Deferred revenue	12	**12.4**	4.3
Total current liabilities		**927.6**	774.4
Non-current liabilities			
Contract liabilities	9	**9.9**	7.9
Interest bearing liabilities	10	**5,147.6**	5,057.3
Deferred tax liabilities	4(c)	**129.6**	200.8
Provisions	11	**85.5**	50.9
Total non-current liabilities		**5,372.6**	5,316.9
Total liabilities		**6,300.2**	6,091.3
Net assets		**2,368.6**	2,379.0
Equity			
Contributed equity		**130.5**	130.5
Reserves		**1,156.3**	1,156.0
Retained earnings		**1,081.8**	1,092.5
Total equity		**2,368.6**	2,379.0

The accompanying notes form part of these financial statements.

Statement of Changes in Equity

For the year ended 30 June 2019

	Contributed Equity $M	Asset Revaluation Reserve $M	Hedge Revaluation Reserve $M	Retained Earnings $M	Total Equity $M
Balance at 1 July 2018	130.5	1,157.3	(1.3)	1,092.5	2,379.0
Profit for the year	—	—	—	2.8	2.8
Other comprehensive income					
Actuarial losses on remeasurement of superannuation defined benefits net of tax	—	—	—	(13.5)	(13.5)
Net increase in reserves	—	—	0.3	—	0.3
Total comprehensive loss	—	—	0.3	(10.7)	(10.4)
Balance at 30 June 2019	**130.5**	**1,157.3**	**(1.0)**	**1,081.8**	**2,368.6**
Balance at 1 July 2017	130.5	1,157.3	(1.6)	1,072.6	2,358.8
Loss for the year	—	—	—	(11.6)	(11.6)
Other comprehensive income					
Actuarial gains on remeasurement of superannuation defined benefits net of tax	—	—	—	31.5	31.5
Net increase in reserves	—	—	0.3	—	0.3
Total comprehensive income	—	—	0.3	19.9	20.2
Balance at 30 June 2018	**130.5**	**1,157.3**	**(1.3)**	**1,092.5**	**2,379.0**

The accompanying notes form part of these financial statements

Statement of Cash Flows

For the year ended 30 June 2019

	Notes	2019 $M	2018 $M
Cash flows from operating activities			
Receipts from customers		**1,560.0**	1,542.6
Payments to suppliers and employees		**(890.1)**	(912.2)
Interest paid		**(325.4)**	(315.3)
Income tax paid		**(38.2)**	(30.8)
Net cash inflow from operating activities	21	**306.3**	284.3
Cash flows from investing activities			
Payments for property, plant and equipment and intangible assets		**(473.3)**	(391.0)
Proceeds from sale of property, plant and equipment		**5.9**	3.7
Net cash outflow from investing activities		**(467.4)**	(387.3)
Cash flows from financing activities			
Proceeds from borrowings		**195.7**	130.8
Repayment of borrowings		**(34.7)**	—
Dividends paid		**—**	(27.9)
Net cash inflow from financing activities		**161.0**	102.9
Net decrease in cash at bank		**(0.1)**	(0.1)
Cash at bank at the beginning of the year		**0.4**	0.5
Cash at bank at the end of the year		**0.3**	0.4

The accompanying notes form part of these financial statements.

1 Reporting entity, basis of preparation, accounting policies and significant changes

Reporting entity

Essential Energy (the Corporation) is a New South Wales (NSW) statutory state owned corporation incorporated under the *State Owned Corporations Act 1989*. The Corporation's ultimate parent is the NSW Government. Accordingly, the Corporation's financial statements form part of the consolidated NSW Total State Sector Accounts.

The Corporation is classified as a for-profit entity for the purposes of the application of Australian Accounting Standards and after consideration of all factors contained in New South Wales Treasury Policy TPP05-4 *Distinguishing For-Profit from Not-For-Profit Entities*. The Corporation's principal activities involve the distribution of electricity, mainly in regional New South Wales and delivery of water services within far west New South Wales.

Basis of preparation

The financial statements comprise a general purpose financial report which has been prepared in accordance with Australian Accounting Standards (AASBs) (including the Australian Accounting Interpretations) adopted by the Australian Accounting Standards Board, the requirements of the *Public Finance and Audit Act 1983*, the *Public Finance and Audit Regulation 2015*, and the *State Owned Corporations Act 1989*. The financial statements of the Corporation also comply with International Financial Reporting Standards (IFRSs) and interpretations adopted by the International Accounting Standards Board.

Items of property, plant and equipment are stated at their fair value. Other financial statement items are prepared in accordance with the historical cost basis except where specified otherwise.

Unless otherwise indicated, the accounting policies set out below have been applied consistently to all periods presented in the financial statements.

When the presentation or classification of items in the financial statements is amended in respect of changes in the current year, the comparative amounts are reclassified to enhance comparability unless the reclassification is impracticable.

The financial statements are presented in Australian dollars. The amounts shown in the financial statements have been rounded to the nearest tenth of a million dollars, unless otherwise stated. Foreign currency transactions are converted to Australian currency at the exchange rates at the date of the transaction, with resulting exchange differences recognised as income or expense in profit or loss.

The Corporation is exempt from Part 2 paragraph 5 of the *Public Finance and Audit Regulation 2015.*

Use of estimates and judgements

The preparation of financial statements require management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods.

Judgements made by management in the application of AASBs that have significant effect on the financial statements and estimates with a significant risk of material adjustment in the next year are discussed in the respective notes.

Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined using the average purchase price of each item.

Share capital

The Corporation is incorporated under the *State-Owned Corporations Act 1989* with issued capital of two fully paid $1 ordinary shares.

Current shareholders are the Treasurer and the Minister for Finance and Small Business on behalf of the NSW Government. The holders of ordinary shares are entitled to receive dividends as declared from time to time and are entitled to one vote per share at meetings of the Corporation. The $2 share capital is included in Contributed Equity in the Statement of Financial Position.

Goods and services tax

Revenues, expenses and assets are recognised net of the amount of Goods and Services Tax (GST), except where the amount of GST incurred is not recoverable from the taxation authority. In these circumstances, the GST is recognised as part of the cost of acquisition of the asset or as part of the expense.

Receivables and payables are stated with the amount of GST included. The net amount of GST recoverable from, or payable to, the taxation authority is included as a current asset or liability in the Statement of Financial Position.

Cash flows are included in the Statement of Cash Flows on a gross basis. The GST components of cash flows arising from investing and financing activities which are recoverable from, or payable to, the taxation authority are classified as operating cash flows.

Other accounting polices

Significant and other accounting policies that summarise the recognition and measurement basis used and are relevant to an understanding of the financial statements are provided throughout the notes to the financial statements.

New and revised accounting standards and Australian Accounting Interpretations

The Corporation applied AASB 15 *Revenue from Contracts with Customers* and AASB 9 *Financial Instruments* for the first time from 1 July 2018. The nature and effect of the changes as a result of adoption of these new accounting standards are described below. The Corporation has not early adopted any standards, interpretations and amendments.

AASB 15

AASB 15 replaces AASB 118 *Revenue*, AASB 111 *Construction Contracts*, Interpretation 13 *Customer Loyalty Programmes* and Interpretation 18 *Transfers of Assets* from Customers. AASB 15 establishes a five-step model to account for revenue arising from customer contracts with customers and requires that revenue be recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer.

The Corporation elected to apply the full retrospective approach. The adoption of AASB 15 did not result in any changes to the results or total assets and total liabilities, however it did result in separate disclosure of revenue from contracts with customers and revenue which did not arise from contracts with customers (note 2) as well as separate disclosure of contract liabilities (note 9).

AASB 9

AASB 9 replaces AASB 9 *Financial Instruments* (December 2009), AASB 9 *Financial Instruments* (December 2010), the existing guidance in AASB 139 *Financial Instruments: Recognition and Measurement* and Interpretation 9 *Reassessment of Embedded Derivatives*. AASB 9 includes revised guidance on the classification and measurement of financial instruments, including a new expected credit loss model for calculating impairment on financial assets, and the new general hedging accounting requirements. There was not any material impact as a result of adopting this standard and no comparative amounts were restated.

The key areas of change within AASB 9 were the classification and measurement of financial instruments, impairment of financial assets and hedge accounting. The results of our assessment of these areas were:

- Classification and measurement of financial instruments – The Corporation has not designated any financial liabilities as at fair value through profit and loss and no changes were required to the classification and measurement of financial instruments. The main financial assets of the Corporation are current trade receivables and cash.
- Impairment – our assessment of impairment of assets using a forward-looking expected credit loss (ECL) approach did not indicate a material change to our impairment provisions and no adjustment was made to the 30 June 2018 balances or 1 July 2017 opening retained earnings in relation to ECLs.
- Hedge accounting – the Corporation does not have any existing hedge arrangements. Under AASB 9, gains and losses arising on cash flow hedges of forecast purchases of non-financial assets will need to be incorporated into the initial carrying amounts of the non-financial assets and are no longer eligible to be reclassified to profit or loss.

1 Reporting entity, basis of preparation, accounting policies and significant changes continued

Accounting standards and interpretations issued but not yet effective

Various new and revised accounting standards and Australian Accounting Interpretations have been published that are not mandatory for the 30 June 2019 reporting period. Other than AASB 16 *Leases* (IFRS 16) published in February 2016, none of these are expected to have a material impact on the Corporation and will not materially affect the Corporation's financial statements. AASB 16 replaces AASB 117 *Leases* and *Interpretation 4 Determining whether an Arrangement Contains and Lease, Interpretation 115 Operating Leases – Incentives and Interpretation 127 Evaluating the Substance of Transactions Involving the Legal Form of a Lease.*

AASB 16 requires lessees to recognise nearly all leases on the balance sheet, reflecting the right to use an asset for a period of time and the associated liability for payments. AASB 16 is effective for the Corporation from annual reporting periods beginning 1 July 2019. The application of the new standard will result in the majority of leases currently recorded as lease commitments and reported as expenses being recorded on the Statement of Financial Position as right of use assets and lease liabilities, recognising the lease expense as depreciation on the asset on a straight line basis and interest on the obligation which will be front-loaded as the obligation is greater early in the lease term. The Corporation plans to adopt AASB 16 using a partial retrospective approach where only the current year will be adjusted as though AASB 16 had always applied, comparative financial information will not be restated, and the opening retained earnings at 1 July 2019 will be restated. The Corporation intends to elect to use the exemptions proposed by AASB 16 for which the lease term ends within 12 months of the date of initial application and the practical expedient for lease contracts for which the underlying asset is low value.

The Corporation has performed a high level assessment of the impact of the implementation of AASB 16. The approximate impact on the financial statement line items is expected to be as follows:

Expected impact on 2020 statement of profit or loss (increase/(decrease) in profit):

	30 June 2020 $M
Operating expenses decrease *	3.4
Depreciation, amortisation and impairment increase	(4.9)
Earnings before interest and taxation (EBIT)	(1.5)
Finance costs increase	(1.7)
Income tax benefit	1.0
Decrease in profit for the year	(2.2)

* Rental expense ($5.9M) less allocation to capital projects ($2.5M)

Impact on opening 2020 statement of financial position (increase/(decrease)):

	1 July 2019 $M
Non-current assets	
Property, plant and equipment	44.3
Total assets	44.3
Liabilities	
Lease liability (current)	5.9
Lease liability (non-current)	47.8
Deferred revenue – lease incentives	(9.4)
Total liabilities	44.3

Expected impact on 2020 statement of cashflows (increase/(decrease)):

	30 June 2020 $M
Cash flows from operating activities	1.7
Cash flows from investing activities	2.5
Cash flows from financing activities	(4.2)

The Corporation has not elected to adopt this standard early. The Corporation will apply the standard from 1 July 2019

2 Revenue

	2019 $M	2018 $M
Revenue from contracts with customers		
a) Network revenue from contracts with customers		
Network Use Of System charges	**1,265.3**	1,245.3
Water and waste water treatment charges	**22.4**	23.5
	1,287.7	1,268.8
b) Other revenue from contracts with customers		
Ancillary Services revenue	**33.7**	33.4
Metering Services Revenue	**32.1**	32.5
Public lighting services charges	**18.3**	16.0
Capital contributions		
– Gifted assets and customer contributions received	**114.1**	81.3
– Recognition/ (deferral) of prepaid capital contributions revenue *	**2.1**	(19.3)
Other revenue from contracts with customers	**22.3**	23.6
	222.6	167.5
Total revenue from contracts with customers	**1,510.3**	1,436.3
c) Other revenue		
Government grant revenue		
– Capital grants	**61.5**	—
– Revenue grants	**6.2**	0.2
Lease revenue	**1.2**	1.0
	68.9	1.2

* Represents the deferral or recognition of prepaid contributions as performance obligations are established or satisfied (refer note 9).

Recognition and measurement

Revenue from contracts with customers is recognised when control of the goods and services are transferred to the customer at an amount that the Corporation expects to be entitled in exchange for those goods or services. The Corporation has concluded that it is the principal in its revenue arrangements. Revenue is measured with reference to the fair value of the consideration received or receivable. There are no material incremental costs of obtaining contracts in any of the arrangements. The Corporation does not adjust the consideration for the effects of a financing component as it receives payment at or shortly after the point of sale. Revenue is recognised for the major business activities as follows:

i) Network Use Of System (NUOS), Ancillary Services, Metering, Public Lighting and Water and Waste Water Treatment (Water) Revenue

The Corporation derives NUOS, Ancillary Services, Metering, Public Lighting and Water revenue from the provision of electricity distribution and provision of Public Lighting, Meter reading and servicing, Water and other network related services. Tariffs are set by regulators and generally include a fixed component and an amount based on the amount of electricity or water used by the customer.

The performance obligation in these arrangements is satisfied over time because the customer simultaneously receives and consumes the benefits as the Corporation provides the service. We record revenue for the sales based on the regulatory approved tariff and volumes distributed.

Unbilled NUOS and water revenue (unread meters) is estimated based on the historical consumption of customers and prices per customer class. The key assumption applied in calculating the unread meters revenue accrual is the Distribution Loss Factors (DLF).

The determination of inputs used is based on historical trends and revenue accrued is materially sensitive to minor movements in DLF. An increase in half of one percentage point in DLF will result in a change in accrued revenue of $6.3M (2018: $6.1M).

2 Revenue continued

The Corporation is subject to regulatory revenue caps and recovery of certain pass-through costs. No liability or asset is recognised for any adjustment that may be made to future prices to reflect any excess or shortfall in revenue as such an adjustment relates to the provision of future services. The following three components of NUOS are subject to a revenue cap or pass-through restrictions which may result in adjustment to future prices:

- Distribution Use Of System (DUOS) revenue – the Corporation operates under a revenue cap pricing framework being the Maximum Allowed Revenue (MAR) as determined by the Australian Energy Regulator (AER) for each year of a determination period.
- Transmission revenue – revenue relates to transmission costs, which operates as a pass-through cost to customers of actual transmission costs paid to transmission network service providers and embedded generators.
- Climate Change Fund revenue – revenue relates to the receipt of contributions to the Climate Change Fund, which operates as a pass-through cost to customers based on the actual contributions paid to the NSW government Office of Environment & Heritage.

ii) Capital contributions

The Corporation receives cash and non-cash contributions from customers and developers, mainly towards the capital cost of network connections and public lighting.

The performance obligation in these arrangements is satisfied at a point in time, being at the time the customer is connected to the network or the Corporation takes control of the asset. Cash capital contributions are initially recorded as liabilities. Once the network asset is completed or modified as outlined in the terms of the contract, the contribution amount is transferred to revenue, and the asset is recognised as property, plant and equipment at cost.

Contributions of non-current assets are recognised as revenue and an asset when the Corporation gains control of the asset. The fair value of contributed assets is recognised as property, plant and equipment at the date at which control is gained and the assets are ready for use.

iii) Other revenue from contracts with customers

The Corporation provides other services such as connection services and unregulated meter services. The revenue for one off services is recognised at a point in time and the revenue for on-going services is recognised over time as the services are performed. The Corporation also sells inventory items and scrap, and recovers the cost of certain works from customers. These are recognised at a point in time, once the items have been delivered or the construction work is complete.

iv) Other Revenue

Government Grant Revenue

Government grants represent assistance by NSW Government and NSW Government agencies in cash or non-cash resources in return for past or future compliance with certain conditions. Where government grants are received in advance they are recognised in the Statement of Financial Position as deferred revenue when they are received and are subsequently recognised as revenue when the Corporation complies with the conditions attaching to them, in accordance with AASB 120 Accounting for Government Grants and Disclosure of Government Assistance.

Grants that compensate the Corporation for the cost of an asset or revenue foregone are recognised in profit or loss as revenue on a systematic basis over the useful life of the asset.

Grants that compensate the Corporation for expenses incurred are recognised as revenue in profit or loss in the same period in which the expenses are incurred or revenue foregone.

Non-cash resources are recognised at their fair value.

Lease revenue

The Corporation leases out its properties, including premises, land and communications towers, under operating lease agreements at market rentals, predominantly on a fixed term basis.

Rental income arising from operating leases is accounted for on a straight-line basis over the lease terms and is included in revenue in the statement of profit or loss and the costs of repairs and maintenance incurred on these properties for the year are recognised as an expense in profit or loss.

3 Expenses

	Notes	2019 $M	2018 $M
a) Operating expenses			
Transmission use of service expense		**219.8**	228.6
Climate change fund contributions		**59.2**	60.4
Employee benefits expense *		**258.5**	229.6
Other costs of distribution of energy and other services		**253.8**	210.9
Debt write offs and change in provision for expected credit losses		**0.1**	0.3
Loss on disposal of property, plant and equipment		**3.9**	6.1
Write off of non-financial assets **		**—**	1.5
Operating leases rental		**6.9**	6.5
Total operating expenses		**802.2**	743.9
b) Depreciation, amortisation and impairment			
Depreciation of property, plant and equipment	6	**343.1**	337.7
Plant and equipment depreciation capitalised ***		**(9.4)**	(9.3)
Depreciation expense		**333.7**	328.4
Amortisation of intangible assets	7	**18.1**	15.2
Impairment losses ****	6	**86.5**	26.9
Total depreciation, amortisation and impairment		**438.3**	370.5

* Employee benefits expense excludes $198.7M (2018: $163.2M) capitalised during the year as part of property, plant and equipment and intangible assets. Defined contribution superannuation expenses of $38.5M (2018: $36.4M) and defined benefit superannuation expenses $5.2M (2018: $5.0M) (note 22 (f)) (before capitalisation) were incurred.

** The expense reflects the write off of property, plant and equipment and intangible assets.

*** Plant and equipment depreciation charge – The depreciation of heavy vehicles and the related plant and equipment used in the construction and maintenance of the electricity network is allocated to cost of projects. Costs allocated to capital projects are recognised in the statement of comprehensive income as depreciation of the constructed network assets.

**** The expense reflects the impairment of water and public lighting assets.

Recognition and measurement

i) Operating leases rental

Payments made under operating leases are recognised in profit or loss on a straight-line basis over the term of the lease. Lease incentives received are recognised in profit or loss as an integral part of the total lease expense and spread over the lease term.

The Corporation has not entered into any finance leases as at reporting date. Leases in terms of which the Corporation assumes substantially all the risks and rewards of ownership are classified as finance leases.

ii) Superannuation expense – defined contribution plans

Most employees are party to a defined contribution scheme under which an entity pays fixed contributions into separate entities and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution plans are recognised as an employee benefit expense in profit or loss in the periods during which services are rendered by employees.

iii) Superannuation expense – defined benefit plans

A defined benefit plan is a post-employment benefit plan other than a defined contribution plan. Past service costs and net interest expense or income are recognised in profit or loss. Past service cost is the increase in the present value of the defined benefit obligation for employee services in prior periods, resulting in the current period from the introduction of, or changes to, post-employment benefits or other long-term employee benefits. Past service costs may either be positive (where benefits are introduced or improved) or negative (where existing benefits are reduced). Net interest is calculated by applying the discount rate to the net defined benefit liability or asset.

	2019 $M	2018 $M
c) Finance Costs		
Interest and finance charges paid or payable	**334.5**	339.5
Unwinding of discount on provisions	**0.1**	0.1
Total finance costs	**334.6**	339.6

3 Expenses continued

Recognition and measurement

Finance costs are recognised as expenses in profit or loss in the period in which they are incurred and include:

Interest and finance costs paid and payable:

- Interest expenses calculated using the effective interest method as described in AASB 9, e.g. interest on overdrafts and short-term and long-term borrowings, including amounts paid or received on interest rate swaps, amortisation of discounts or premiums relating to borrowings and indexation adjustments on CPI indexed bonds;
- amortisation of ancillary costs incurred in connection with the arrangement of borrowings;
- a government loan guarantee fee assessed by NSW Treasury; and
- discount expense applied to provisions and amortised assets.

The amount excludes finance costs relating to qualifying assets, in which case they are capitalised as part of the cost of those assets in accordance with AASB 123 *Borrowing Costs*. Qualifying assets are assets that take a substantial time to get ready for their intended use. The Corporation considers this to be 12 months or more.

Capitalisation of borrowing costs is undertaken where a direct relationship can be established between the borrowings and the relevant projects giving rise to qualifying assets. Typically, these are projects whose expected total project expenditure is approximately $10M or greater. No borrowing costs were capitalised during the year (2018: $nil).

	2019 $M	2018 $M
d) Maintenance expenses (included in (a) above)		
Employee benefits expense	**82.7**	74.6
Contracted labour and other (non-employee related) expenses	**341.4**	285.6
	424.1	360.2

4 Income tax

	2019 $M	2018 $M
a) Income tax recognised in profit or loss		
Current tax expense		
Current year	**66.7**	30.2
Adjustments for prior years	**0.2**	0.2
	66.9	30.4
Deferred tax credit		
Origination and reversal of temporary differences	**(65.4)**	(35.1)
Over-provided in prior years	**(0.2)**	(0.2)
	(65.6)	(35.3)
Total income tax expense/ (benefit) in profit or loss	**1.3**	(4.9)
Numerical reconciliation between tax expense and pre-tax net profit		
Profit/ (loss) before tax	**4.1**	(16.5)
Income tax at the statutory tax rate of 30 per cent (2018: 30 per cent)	**1.2**	(4.9)
Increase/ (decrease) in income tax expense due to:		
Non-deductible expenses	**0.1**	—
Income tax expense/ (benefit) on pre-tax net profit	**1.3**	(4.9)
b) Income tax recognised in other comprehensive income		
Items not to be reclassified subsequently to profit or loss:		
– Actuarial gains or losses on remeasurement of defined benefits superannuation	**(5.8)**	13.5
Items to be reclassified subsequently to profit or loss:		
– Revaluation of hedge derivatives	**0.2**	0.2
Income tax (credited)/ charged directly to other comprehensive income	**(5.6)**	13.7
c) Recognised deferred tax assets and liabilities		
Deferred tax (assets) and liabilities are attributable to the following:		
Property, plant and equipment	**218.9**	274.1
Defined benefit superannuation benefits	**(13.6)**	(7.8)
Other liabilities and provisions	**(75.0)**	(64.8)
Other items	**(0.7)**	(0.7)
Net tax liabilities	**129.6**	200.8

The deductible temporary differences and tax losses do not expire under current tax legislation.

4 Income tax continued

Movement in temporary tax differences

	1 July 2018 $M	Recognised in profit or loss $M	Recognised in other comprehensive income $M	30 June 2019 $M
Property, plant and equipment	274.1	(55.2)	—	218.9
Defined benefit superannuation liabilities	(7.8)	—	(5.8)	(13.6)
Other liabilities and provisions	(64.8)	(10.2)	—	(75.0)
Other items	(0.7)	(0.2)	0.2	(0.7)
	200.8	(65.6)	(5.6)	129.6

	1 July 2017 $M	Recognised in profit or loss $M	Recognised in other comprehensive income $M	30 June 2018 $M
Property, plant and equipment	311.2	(37.1)	—	274.1
Defined benefit superannuation liabilities	(21.7)	0.4	13.5	(7.8)
Other provisions	(66.4)	1.6	—	(64.8)
Other items	(0.7)	(0.2)	0.2	(0.7)
	222.4	(35.3)	13.7	200.8

Recognition and measurement

Essential Energy is exempt from federal income tax under the Income Tax Assessment Acts, however, the Corporation is subject to the National Tax Equivalent Regime which is based on the Income Tax Assessment Acts. Tax equivalents are payable to the Office of State Revenue.

Income tax on the profit or loss for the year comprises current and deferred tax. Income tax is recognised in profit or loss except to the extent that it relates to items recognised directly in equity.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is provided using the statement of financial position liability method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantively enacted at the reporting date.

A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the asset can be utilised. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

5 Trade and other receivables – current

	2019 $M	2018 $M
Trade receivables	**61.8**	61.4
Less: allowance for expected credit losses	**(1.1)**	(1.2)
	60.7	60.2
Accrued revenue from unread meters	**163.4**	167.6
	224.1	227.8
Prepayments	**11.0**	11.5
Other receivables	**13.8**	10.5
Less: allowance for expected credit losses	**(0.4)**	(0.6)
	248.5	249.2

The movement in the allowance for expected credit losses is detailed below:		
Opening balance at 1 July	**1.8**	1.8
Provision for expected credit losses	**0.2**	0.3
Write-off of debts	**(0.5)**	(0.3)
Closing balance at 30 June	**1.5**	1.8

The Corporation's exposure to credit risks related to trade and other receivables are disclosed in note 13.

Recognition and measurement

Trade and other receivables are initially recognised at fair value and are subsequently measured at amortised cost less any allowance for expected credit losses. Trade receivable include an estimate of the value of unbilled NUOS revenue (refer note 2).

A provision for expected credit losses is recognised in profit or loss and reflected in an allowance account against receivables. When a subsequent event causes the amount of the allowance for expected credit losses to decrease, the decrease in allowance for expected credit losses is reversed through profit or loss.

6 Property, plant and equipment

	Notes	Land and buildings $M	System assets $M	Plant and equipment $M	Total $M
Year ended 30 June 2019					
Gross carrying amount		220.8	8,776.1	481.0	9,477.9
Accumulated depreciation and impairment		(20.8)	(991.3)	(277.0)	(1,289.1)
Net carrying amount		**200.0**	**7,784.8**	**204.0**	**8,188.8**
Net carrying amount at start of year		196.1	7,624.4	187.6	8,008.1
Additions		10.1	550.6	59.4	620.1
Disposals and write offs		(1.8)	(5.6)	(2.4)	(9.8)
Depreciation expense	3(b)	(4.4)	(298.1)	(40.6)	(343.1)
Impairment	3(b)	—	(86.5)	—	(86.5)
Net carrying amount at end of year		**200.0**	**7,784.8**	**204.0**	**8,188.8**
Year ended 30 June 2018					
Gross carrying amount		212.8	8,238.9	453.6	8,905.3
Accumulated depreciation and impairment		(16.7)	(614.5)	(266.0)	(897.2)
Net carrying amount		196.1	7,624.4	187.6	8,008.1
Net carrying amount at start of year		194.1	7,559.8	195.3	7,949.2
Additions		7.1	394.0	32.8	433.9
Disposals and write offs		(0.3)	(8.6)	(1.5)	(10.4)
Depreciation expense	3(b)	(4.8)	(293.9)	(39.0)	(337.7)
Impairment	3(b)	—	(26.9)	—	(26.9)
Net carrying amount at end of year		196.1	7,624.4	187.6	8,008.1

	2019 $M	2018 $M
Assets under construction		
Expenditure on construction in progress at the end of the year	**556.0**	442.8
Historic cost of revalued assets		
The carrying amount of assets had they been carried under the cost model is:		
Land and buildings	**168.6**	165.0
System assets	**7,189.6**	6,949.1
Plant and equipment	**204.0**	187.6

Recognition and measurement

i) Initial recognition

Items of property, plant and equipment purchased or constructed are initially recognised at cost. Such costs include the cost of replacing part of the plant and equipment. Cost includes expenditure that is directly attributable to the acquisition and or construction of the asset including costs of materials, services, and direct labour, the initial estimate, where relevant, of the costs of dismantling and removing the items and restoring the site on which they are located and an allocated proportion of supporting overhead costs. Capitalised costs also include borrowing costs where appropriate. Non-system assets purchased below $600 are expensed as acquired.

Management judgement is required in the assessment of the types of costs that are directly attributable to the construction of the Corporation's property, plant and equipment. Satisfying the directly attributable criteria requires an assessment of those unavoidable costs that, if not incurred, would result in the property, plant and equipment not being constructed. Directly attributable overheads are allocated to the cost of construction of an asset based on direct cost of capital projects as a proportion of total direct project costs.

Property, plant and equipment transferred from customers, developers or Government agencies is initially measured at fair value at the date on which control is obtained.

ii) Measurement after initial recognition

After initial recognition as an asset, items of property, plant and equipment are measured at fair value.

System assets and land and buildings

System assets comprise physical assets which make up infrastructure used directly for the distribution of electricity, provision of public lighting, and water and waste water infrastructure.

System assets and land and buildings are stated at fair value at the date of revaluation less any subsequent accumulated depreciation and impairment losses. The fair value of system assets and land and buildings is determined using an income approach.

The valuation methodology reflects a discounted cash flow methodology to value the Corporation, and a calculation to subtract the value of other business assets and liabilities to arrive at a value for the Corporation's system assets and land and buildings.

The income approach is based on a discounted cash flow model using the following methods and assumptions:

- Use of an estimate of likely future cash flows to be derived based on financial forecasts;
- The time value of money, represented by the current market risk-free rate and the price for bearing the uncertainty inherent in the asset, as encapsulated in the discount rate; and
- A multiple of the forecast regulated asset base (RAB) at the end of the forecast period used as a proxy for the terminal value. The terminal RAB multiple is determined with reference to market observable multiples.

System assets and land and buildings are comprehensively valued at least every three years. In other years an interim management valuation is performed at each reporting date to ensure the net carrying value of system asset and land and buildings does not differ materially from their fair value. An interim formal valuation is undertaken where there is an indication that the valuation may differ from the carrying value by greater than 20 per cent. A comprehensive valuation was last completed at 30 June 2017.

The distribution network, comprising system assets, land and buildings, and easements, as a whole is considered to be a "single asset" for the purposes of valuation. This is because all components within the network must work together to reliably supply electricity. Further, due to the specialised nature of the Corporation's network, system assets, land and buildings, and easements cannot be readily sold to third parties for different uses.

Plant and equipment

Plant and equipment assets comprise non-specialised assets with short useful lives. These assets are deemed to be stated at fair value which is equivalent to their depreciated historical costs.

iii) Revaluations

Revaluation increments are recognised in other comprehensive income and credited directly to the asset revaluation reserve, except where an increment reverses a revaluation decrement in respect of that asset class which was previously recognised as an expense in net profit or loss, the increment is recognised immediately in net profit or loss. Revaluation decrements are recognised in net profit or loss, except that, to the extent that a credit balance exists in the asset revaluation reserve in respect of the same asset, they are debited directly to the asset revaluation reserve. Accumulated depreciation as at the revaluation date is eliminated against the gross carrying amount of the asset and the net amount is restated to the revalued amount of the asset.

Gains and losses on disposal of revalued assets are included in profit or loss for the year. Any related revaluation increments in the asset revaluation reserve are transferred to Retained Earnings upon disposal.

iv) Impairment of property, plant and equipment and intangible assets

The Corporation assesses the carrying amounts of non-financial assets at the end of each reporting period by evaluating conditions that may indicate potential impairment of assets. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows which are largely independent of the cash inflows from other assets or groups of assets (cash-generating units or CGUs).

The recoverable amount of the Water CGUs was estimated to be $nil as at 30 June 2019 (2018: $nil). Accordingly, no value is carried in the books of the Corporation in respect of the Water CGU assets. All assets acquired or constructed are fully impaired immediately after initial recognition. The recoverable amount of the Public Lighting CGU's system assets was estimated at $8.1M as at 30 June 2019 (30 June 2018: $10.5M) with an impairment of assets being recognised as an expense during the current period.

v) Depreciation

Where parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate components of property, plant and equipment. Depreciation is charged to profit or loss on a straight-line basis over the estimated useful lives of each part of an item of property, plant and equipment. Land is not depreciated. Depreciation methods and useful lives are reviewed at each reporting date and adjusted prospectively, if appropriate.

The estimated useful lives in the current and comparative periods are as follows:

Buildings	40 years
Leasehold improvements	Lesser of term of lease or useful life
System assets	7 – 50 years
Plant and equipment	3 – 20 years

7 Intangible assets

	Notes	Easements $M	Computer software $M	Other $M	Total $M
Year ended 30 June 2019					
At cost		81.8	135.9	56.8	274.5
Accumulated amortisation		—	(65.5)	(10.9)	(76.4)
Net carrying amount		**81.8**	**70.4**	**45.9**	**198.1**
Net carrying amount at start of year		81.6	67.4	36.8	185.8
Acquisitions		0.2	16.9	13.3	30.4
Amortisation	3(b)	—	(13.9)	(4.2)	(18.1)
Net carrying amount at end of year		**81.8**	**70.4**	**45.9**	**198.1**
Year ended 30 June 2018					
At cost		81.6	123.2	43.1	247.9
Accumulated amortisation		—	(55.8)	(6.3)	(62.1)
Net carrying amount		81.6	67.4	36.8	185.8
Net carrying amount at start of year		81.2	50.8	30.0	162.0
Acquisitions		0.4	29.1	10.3	39.8
Amortisation	3(b)	—	(11.7)	(3.5)	(15.2)
Write offs		—	(0.8)	—	(0.8)
Net carrying amount at end of year		81.6	67.4	36.8	185.8

	2019 $M	2018 $M
Intangible assets under construction		
Expenditure on development or purchase of intangible assets in progress at the end of the year:	**66.7**	61.8

Recognition and measurement

Intangible assets that are acquired externally or internally generated by the Corporation are stated at cost less accumulated amortisation and impairment losses.

Subsequent expenditure on capitalised intangible assets is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure is expensed as incurred. Easements, which are an interest in land allowing access to network assets, are not amortised as they are granted for an unlimited time. Easements are valued annually together with system assets and land and buildings as described in note 6(ii).

Amortisation is charged to profit or loss on a straight-line basis over the estimated useful lives of intangible assets unless such lives are indefinite. Intangible assets with an indefinite useful life are tested for impairment at each reporting date. Amortisation methods and useful lives are reviewed at each reporting date and adjusted prospectively, if appropriate.

The estimated useful lives in the current and comparative periods are as follows:

Easements	Indefinite
Computer software	4 years
Other intangibles	10 years

8 Trade and other payables

	2019 $M	2018 $M
Trade payables	**18.9**	14.9
Interest payable	**149.8**	148.9
Accruals	**84.2**	67.4
Payroll related payables	**13.0**	13.2
Other payables	**9.2**	9.3
	275.1	253.7

Details regarding liquidity risk including a maturity analysis of the above payables are disclosed in note 13.

Recognition and measurement

Trade and other payables represent liabilities for goods and services provided to the Corporation prior to the end of the financial year and there is an obligation to make future payment. The amounts are unsecured and are usually paid within 30 days of recognition.

After initial recognition of these liabilities at fair value, they are measured at amortised cost using the effective interest rate method. For short term payables with no stated interest rate this measurement is equivalent to the original invoice amount.

9 Contract liabilities

	2019 $M	2018 $M
Contract liabilities		
Prepaid capital contributions		
– Current	**7.3**	11.4
– Non-current	**9.9**	7.9
	17.2	19.3

Contract liabilities

A contract liability is the obligation to transfer goods or services to a customer for which the Corporation has received consideration (or an amount of consideration is due) from the customer. If a customer pays consideration before the Corporation transfers goods or services to the customer, a contract liability is recognised when the payment is made or the payment is due (whichever is earlier). Contract liabilities are recognised as revenue when the Corporation performs under the contract.

Prepaid capital contributions

Prepaid capital contributions mainly include contributions by public lighting customers up to 30 June 2009 intended to fund the replacement of assets at the end of their life. For public lighting the revenue is recognised once the Corporation has replaced the asset. For other prepaid capital contributions, the revenue is recognised as set out in note 2 (ii).

10 Interest bearing liabilities

	2019 $M	2018 $M
Current liabilities		
Current portion of borrowings	**404.6**	326.1
Non-current liabilities		
Non-current portion of borrowings	**5,147.6**	5,057.3

	2019 $M	2018 $M
Changes in liabilities arising from financing activities		
Total interest bearing liabilities at beginning of year	**5,383.4**	5,228.8
Net cash flows from proceeds from and repayments of borrowings	**161.0**	130.8
Capitalisation of indexed bonds indexation	**9.8**	10.5
Movement and settlement of deferred interest	**(1.5)**	13.9
Movement in forward rate contracts	**(0.5)**	(0.6)
Total interest bearing liabilities at end of year	**5,552.2**	5,383.4

Borrowings are unsecured and repayable in full on various maturity dates. For more information about the Corporation's exposure to interest rate risk and liquidity risk see note 13.

Recognition and measurement

Interest bearing liabilities are initially recognised at fair value, net of transaction costs incurred. After initial recognition, borrowings are subsequently measured at amortised cost using the effective interest method. This includes capital indexed bonds whose carrying amount is restated at each reporting date by way of an indexation adjustment based on the Consumer Price Index (CPI) in Australia.

Amortised cost is calculated by taking into account any discount or premium on settlement. The difference between the face value and the capital value of these debt securities is amortised over the life of the specific instrument. Interest associated with these instruments is brought to account on an accrual basis. Indexation adjustments on CPI indexed bonds are also recognised as part of finance costs in profit or loss.

Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the amortisation process.

Borrowings shown as a current liability are nominally due for repayment within twelve months. However due to the availability of roll-over facilities supported by the NSW Treasury approved core debt limit and the liquidity of the underlying debt instruments, the Corporation may not necessarily need to repay these borrowings within twelve months.

11 Provisions

	Employee benefits $M	Environmental and asset remediation $M	Workers' compensation $M	Other $M	Total $M
At 1 July 2018	204.0	12.2	2.7	1.8	220.7
Additional provisions	80.2	14.9	3.7	0.9	99.6
Amounts used	(38.2)	(1.9)	—	(0.3)	(40.3)
Amounts reversed	(2.2)	(1.5)	—	(0.5)	(4.2)
Unwinding of discount	—	0.1	—	—	0.1
At 30 June 2019	243.8	23.8	6.4	1.9	275.9
Current	177.5	5.6	5.4	1.9	190.4
Non-Current	66.3	18.2	1.0	—	85.5
At 30 June 2019	243.8	23.8	6.4	1.9	275.9
Current	159.6	5.9	2.5	1.8	169.8
Non-Current	44.4	6.2	0.3	—	50.9
At 30 June 2018	204.0	12.1	2.8	1.8	220.7

Recognition and measurement

A provision is recognised in the Statement of Financial Position when the Corporation has a present legal or constructive obligation as a result of a past event, it is probable that an outflow of economic benefits will be required to settle the obligation and the obligation can be reliably measured. If the effect is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. The following reflects specific policies and other information regarding the key provisions:

i) Dividends

Provision is made for any dividend and other payments determined by the directors and approved by the shareholding ministers on or before the end of the financial year but not distributed at year end. The dividend has regard to the annual performance agreement (Statement of Corporate Intent) with NSW Treasury. No dividend was provided at 30 June 2019 (2018: $nil).

ii) Employee benefits

All liabilities for employee benefits that are expected to be paid for services provided up to the reporting date by employees represent present obligations and are fully provided for in the financial statements.

Liabilities for employee benefits for wages, salaries, annual leave, preserved sick leave and long service leave that are expected to be wholly settled within twelve months of the reporting date are calculated at undiscounted amounts based on remuneration wage and salary rates that the Corporation expects to pay as at reporting date including related on-costs, such as workers compensation, insurance and payroll tax.

The liability for long service leave is recognised in the provision for employee benefits and measured as the present value of expected future payments using the projected unit credit method. Consideration is given to expected future wage and salary levels, experience of employees' departures and periods of service.

Expected future payments (over twelve months) are discounted using market yields on high quality corporate bonds (HQCBs) as at reporting date with terms to maturity and currency that match, as closely as possible, the estimated future cash outflows.

Actuarial assessment of preserved sick leave, annual leave and long service leave was calculated as at 19 April 2017 by Cumpston Sarjeant Pty Ltd. This was used as a basis for calculating the current year's provision by applying a methodology supplied by the actuary. Long service leave and the component of annual leave not expected to be wholly settled within twelve months have been discounted using HQCB yields as at reporting date. Employee benefits are recorded in the Statement of Financial Position as current liabilities where the Corporation has no unconditional right to defer settlement. Amounts provided for in relation to defined benefit superannuation obligations are based on an actuarial assessment. All other employee benefit amounts expected to be settled within 12 months have been measured at the amounts expected to be paid when the liabilities are settled.

11 Provisions continued

The current provision for employee benefits includes accrued annual leave, preserved sick leave and long service leave. For long service leave it covers all unconditional entitlements where employees have completed the required period of service and those where employees are entitled to pro-rata payments in certain circumstances. The entire amount of the provision for accrued annual leave, vesting sick leave and unconditional entitlements to long service leave of $177.5M (2018: $159.6M) is presented as current, since the Corporation does not have an unconditional right to defer settlement for any of these obligations. However, based on experience, the Corporation does not expect all employees to take the full amount of accrued leave or require payment within the next 12 months. The following amounts, included in the current provision for employee benefits, reflect leave that is not expected to be taken or paid within the next 12 months.

	2019 $M	2018 $M
Current leave obligations expected to be settled after 12 months	**144.2**	128.0

The non-current provision for employee benefits includes $47.0M (2018: $27.6M) relating to the defined benefit superannuation liability.

iii) Environmental and asset rectification

A provision for asset remediation was made in 2019 based on a number of options which include completion dates of between 2024 and 2044 with discount rates of between 1.0 per cent and 2.0 per cent. Provisions for environmental rectification work are expected to be settled between 2020 and 2022. In respect of obligations to be settled by 2020 the effect of the time value of money has been deemed to be immaterial. Where settlement is expected by 2022 a discount rate of 0.9 per cent (2018: 2.2 per cent) has been applied. Provision is made for lease make good costs expected to be incurred on termination of existing leases. The majority of the make good costs are expected to be incurred in 2034 and a discount rate of 1.6 per cent has been applied.

iv) Workers compensation

The Corporation is on a Loss Prevention and Recovery Scheme for its workers compensation insurance. The scheme structure involves a premium calculation which is finalised over a four-year period finishing in 2021 for the 2019 financial year cover period. A discount rate of 1.6 per cent (2018: 3.0 per cent) has been applied.

v) Other

Other provisions include legal claims relating to property damage, personal injury and workplace incidents. The amount of each obligation is the best estimate of the expenditure required to settle the obligation based on current legal requirements.

12 Deferred revenue

	2019 $M	2018 $M
Deferred government grants	**2.9**	3.1
Other deferred revenue	**9.5**	1.2
	12.4	4.3

Deferred government grants

The Corporation has received NSW Government Grant monies under the NSW Government's Water Security for Regions Program, which is part of the Restart NSW Fund, which has been set up to improve water security for regional New South Wales. These project components associated with drought related emergency water supply, include the construction and operation of desalination facilities and associated infrastructure and water treatment at Menindee. Following significant inflows of water into the Menindee Lakes and Broken Hill catchment in late 2016, the operating component of the project has concluded. The funding deed will remain in place to keep this facility in a 'care and maintenance' mode until the long-term solution to secure Broken Hill's water supply is in place. This long term water supply solution was finalised in April 2019 when construction of the Murray Pipeline was completed. The project components are practically complete and finalisation of the funding deed is expected during the 2020 financial year.

Other deferred revenue

Other deferred revenue consists primarily of lease incentives received which are amortised over the expected period of the lease.

13 Financial risk management

a) Financial risk management objectives and policies

Financial instruments comprise cash, trade debtors, trade creditors, short term deposits, borrowings and derivatives. The main purpose of these financial instruments is to raise finance or invest surplus cash for the Corporation's operations, and to manage exposure to price movements.

The Corporation's treasury function, leadership team and Board manage the Corporation's exposure to key financial risks including credit risk, currency risk, interest rate risk, liquidity risk and commodity price risk, in accordance with the Board's financial risk management policies. The Board reviews and agrees policies for managing each of the key financial risks.

Derivative financial instruments can be used to hedge exposure to fluctuations in foreign exchange rates, commodity prices and interest rates.

b) Credit risk

Credit risk is the risk of financial loss arising if counterparties failed to meet their financial obligations to the Corporation under a financial instrument or customer contract.

The exposure to credit risk on trade and other receivables, and accrued income from unread meters of the Corporation that have been recognised in the Statement of Financial Position, is generally the carrying amount, net of any provision for expected credit losses.

The Corporation manages the credit risk of trade receivables through requiring customers to pay in accordance with agreed payment terms. The payment terms are generally 15-30 days. The credit risk related to distribution network customers (retailers) is the risk of a retailer defaulting on their obligations. The Corporation operates in accordance with the National Energy Rules under the National Energy Law which provides credit support guidelines. Under these guidelines the Corporation has the ability to obtain credit support from a retailer in certain circumstances where the retailer defaults. In the event of significant retailer failure, an application to recoup such losses under general pass through provisions available through the AER would be considered. As at 30 June 2019 the Corporation had trade receivables of $53.7M (2018: $57.4M) from retailers. Three retailers represented 74 per cent (2018: 73 per cent) of these trade receivables.

The Corporation's credit risk on other assets is minimised as it transacts predominantly with other government owned entities. Where the counterparty is a non-government owned corporation its credit worthiness is established in accordance with Essential Energy's risk management policies which includes the use of external credit ratings which are used to derive risk limits as approved by the Board.

Set out below is information about the credit risk exposure of the Corporation's trade receivables using a provision matrix:

	2019		2018	
Days past due	Carrying Amount $M	Expected Credit Loss $M	Carrying Amount $M	Expected Credit Loss $M
Current	**56.6**	**—**	54.9	—
<30 days	**2.4**	**0.1**	2.1	0.1
30-90 days	**0.7**	**—**	1.1	—
91-180 days	**0.3**	**0.1**	0.5	0.2
>180	**1.8**	**1.3**	2.8	1.5
Total	**61.8**	**1.5**	61.4	1.8

An impairment review is performed at each reporting date taking into account the days past due for the groupings of customer segments with similar loss patterns, eg. retailers and sundry debtors. The review considers the probability of collection, reasonable and supportable information that is available at the reporting date. The majority of receivables relate to regulated retailers with payments required within 30 days of billing, with defaults being unpredictable at the time of billing, therefore expected credit losses for retailers are assessed based on observable default events. For non-retail receivables the aging of the debtors is the key indicator of credit risk and the Corporation's historical credit loss experience is used to determine the expected credit loss. Economic conditions are not viewed as a factor that has an observable impact on the expected losses. The Corporation's historical credit loss experience may not be representative of customer's actual default in the future.

13 Financial risk management continued

c) Currency risk

Currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates

The Corporation considers using forward exchange contracts to hedge its foreign currency risk for all committed foreign exchange exposures that exceed A$500,000 in value (2018: A$1,000,000). At reporting date, for both current and prior year, there is no material exposure to any foreign currency.

There are no significant assets or liabilities denominated in currencies other than Australian dollars.

d) Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates.

The Corporation adopts a policy of ensuring that its debt portfolio is managed within a Board approved risk management framework. Interest rate risk is managed through a combination of fixed rate long term duration debts, inflation linked securities, floating rate debts and interest rate derivative instruments.

The interest rate profile for the Corporation's interest bearing financial instruments at the reporting date was:

	2019 $M	2018 $M
Carrying amount		
Fixed rate		
Financial liabilities	**(4,735.8)**	(4,543.5)
Floating rate		
Financial assets	**0.8**	0.4
Financial liabilities	**(3.6)**	(38.3)
	(2.8)	(37.9)
Inflation Indexed		
Financial liabilities	**(812.8)**	(801.6)

The Corporation does not account for any fixed rate financial assets and liabilities at fair value through profit or loss. The Corporation has variable rate financial assets at year end and it is estimated that a change in interest rates by one percentage point at reporting date would have an immaterial impact on the Corporation's profit before tax.

In addition, the Corporation has variable rate financial liabilities at year end and it is estimated that a change in interest rates by one percentage point at reporting date is estimated to have negligible impact on profit before tax (2018: $0.4M). Changes in inflation also affect the Corporation's finance costs due to its holdings of indexed financial liabilities. A change in inflation rates of half of one percent at reporting date is estimated to impact the profit before tax by $4.1M (2018: $4.0M).

e) Capital risk management

The Corporation's objectives are to establish and maintain an efficient capital structure based on a target credit rating (BBB). The target capital structure to achieve the target credit rating over the medium term will be negotiated between Shareholders and the Corporation as part of the Statement of Corporate Intent process.

An efficient capital structure includes an acceptable range of gearing levels. The Corporation monitors debt levels using the gearing ratio. The gearing ratio is calculated as net debt divided by total capital as shown below.

	2019 $M	2018 $M
Total borrowings	**5,552.2**	5,383.4
Less: cash at bank	**0.3**	0.4
Net debt	**5,551.9**	5,383.0
Total equity	**2,368.6**	2,379.0
Total capital	**7,920.5**	7,762.0
Gearing ratio	**70.1%**	69.4%

f) Liquidity risk

Liquidity risk is the risk of difficulty in ensuring the availability of sufficient funds to meet obligations associated with financial liabilities that are settled by delivering cash or another financial asset. The Corporation's liquidity risks are managed by our treasury function considering cashflow forecasts against the availability of readily accessible standby facilities and other funding arrangements.

As at 30 June 2019 the Corporation had an approved core debt borrowing limit of $6,109.6M (2018: $6,109.6M) of which $561.0M was unused as at 30 June 2019 (2018: $766.3M). The Corporation also has an approved New South Wales Treasury Corporation (TCorp) Come and Go Facility limit of $250.0M (2018: $250.0M) and approval to obtain a commercial bank overdraft facility limit of up to $15.0M (2018: $15.0M) to fund working capital (at 30 June 2019 a facility of $2.0M (2018: $2.0M) was in place). Planned future capital expenditure will be funded through TCorp borrowings. Future committed expenditure is disclosed in Note 19.

While current liabilities are greater than current assets as at 30 June 2019 the Corporation continues to trade as a going concern. It is noted that the Corporation derives revenue from non-current assets. The TCorp Come and Go Facility had $246.4M (2018: $211.7M) unused and the commercial bank overdraft facility limit had $2.0M unused (2018: $2.0M). On 13 June 2018 NSW Treasury confirmed that the core debt borrowing limit of $6,109.6M remained unchanged and has no expiry date.

The Corporation's funding requirement and strategy is reviewed annually and monitored on an ongoing basis. There were no defaults or breaches on any borrowings payable and no assets have been pledged as collateral. The Corporation maintains a balance between continuity of funding and flexibility using bank overdrafts and debt. The Corporation manages debt using a portfolio approach.

The contractual maturity of the Corporation's fixed and floating rate financial liabilities are shown in the following table.

	Carrying amount $M	Contractual cash flows total $M	1 year or less $M	1–5 years $M	More than 5 years $M
30 June 2019					
Non derivative financial liabilities					
Fixed rate borrowings	4,735.8	5,675.1	588.3	2,395.8	2,691.0
Floating rate borrowings	3.6	3.6	3.6	—	—
Inflation indexed borrowings	812.8	968.1	22.4	368.9	576.8
Trade and other payables (excluding statutory payables)	261.1	261.1	261.1	—	—
	5,813.3	**6,907.9**	**875.4**	**2,764.7**	**3,267.8**

	Carrying amount $M	Contractual cash flows total $M	1 year or less $M	1–5 years $M	More than 5 years $M
30 June 2018					
Non derivative financial liabilities					
Fixed rate borrowings	4,543.5	5,519.0	480.6	2,348.1	2,690.3
Floating rate borrowings	38.3	38.3	38.3	—	—
Inflation indexed borrowings	801.6	1,012.6	22.2	376.8	613.6
Trade and other payables (excluding statutory payables)	238.9	238.9	238.9	—	—
	5,622.3	6,808.8	780.0	2,724.9	3,303.9

The amounts disclosed above for borrowings are the contractual undiscounted cash flows. These disclosed contractually committed cash flows will not differ from the timing and the amounts expected to be incurred for these liabilities, however liabilities will change for floating borrowings and inflation indexed borrowings due to changes in market rates and CPI inflation rates.

13 Financial risk management continued

g) Derivative financial instruments and hedge accounting

Initial recognition and subsequent measurement

The Corporation may use derivative financial instruments, such as forward currency contracts and forward interest rate contracts, to hedge its foreign currency risks and interest rate risks, respectively. Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently re-measured to their fair value at the end of each reporting period.

Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

For the purpose of hedge accounting, hedges are classified as:

- Fair value hedges when hedging the exposure to changes in the fair value of a recognised asset or liability or an unrecognised firm commitment.
- Cash flow hedges when hedging the exposure to variability in cash flows that is either attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction or the foreign currency risk in an unrecognised firm commitment.

At the inception of a hedge relationship, the Corporation formally designates and documents the hedge relationship to which the Corporation wishes to apply hedge accounting and the risk management objective and strategy for undertaking the hedge. The documentation includes identification of the hedging instrument, the hedged item or transaction, the nature of the risk being hedged and how the Corporation will assess the effectiveness of changes in the hedging instrument's fair value in offsetting the exposure to changes in the hedged item's fair value or cash flows attributable to the hedged risk. Such hedges are assessed on an ongoing basis to determine that they have been highly effective throughout the financial reporting periods for which they were designated.

Hedges that meet the criteria for hedge accounting are accounted for as described below:

Fair value hedges

Changes in fair value of derivatives that are designated and qualify as fair value hedges are recognised in profit or loss immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk. The change in the fair value of the hedging instrument and the change in the hedged item attributable to the hedged risk are recognised in profit or loss in the line item relating to the hedged item.

Hedge accounting is discontinued when the Corporation revokes the hedging relationship, when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer qualifies for hedge accounting. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortised to profit or loss from that date.

Cash flow hedges

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in other comprehensive income and accumulated under the heading hedge revaluation reserve in equity. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss and is included in the 'other gains or loss' line item.

Amounts previously recognised in other comprehensive income and accumulated in equity are reclassified to profit or loss in the period when the hedged item affects profit or loss, in the same line as the recognised hedged item. However, when the hedged forecast transaction results in the recognition of a non-financial asset or non-financial liability, the gains and losses previously recognised in other comprehensive income and accumulated in equity are transferred from equity and included in the initial measurement of the cost of the non-financial assets or non-financial liability.

Hedge accounting is discontinued when the Corporation revokes the hedging relationship, when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer qualifies for hedge accounting. At that time any gain or loss recognised in other comprehensive income and accumulated in equity remains in equity and is transferred to profit or loss when the forecast transaction occurs. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognised immediately in profit or loss.

h) Derecognition of financial instruments

The Corporation derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Corporation retains substantially all the risks and rewards of ownership of a transferred financial asset, the Corporation continues to recognise the financial asset and the associated liability.

The Corporation derecognises a financial liability when, and only when, its obligation specified in the contract is discharged, cancelled or expired.

14 Fair value measurements

This note provides information about how the Corporation determines fair value of all assets and liabilities for which fair value is measured or disclosed in the financial statements.

The Corporation measures items of property, plant and equipment at fair value at reporting date. Also, fair values of financial instruments measured at amortised cost are disclosed.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability, or
- In the absence of a principal market, in the most advantageous market for the asset or liability

The principal or the most advantageous market must be accessible by the Corporation.

The fair value of an asset or liability is measured using assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Corporation uses valuation techniques that are appropriate in the circumstances and for which sufficient data is available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 – Quoted (unadjusted) market prices in active markets for identical assets or liabilities
- Level 2 – Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable
- Level 3 – Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

For assets and liabilities that are recognised in the financial statements at fair value on a recurring basis, the Corporation determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

a) Recognised fair value measurements

The Corporation measures and recognises the following assets and liabilities at fair value on a recurring basis:

- System assets
- Land and buildings

The fair values of other financial assets and financial liabilities are determined in accordance with generally accepted pricing models based on discounted cash flow analysis using maximum observable market input data which include prices from observable current market transactions and dealer quotes for similar instruments.

System assets and land and buildings are valued using techniques described in note 6. All resulting fair value estimates for system assets and land and buildings are included in level 3.

b) Fair value measurements using significant unobservable inputs (level 3)

i) Transfers between levels 2 and 3 and changes in valuation techniques

There were no transfers between level 2 and 3 and no changes in valuation techniques during the current and prior year. The movements and balances for level 3 items, being land and buildings and system assets, are disclosed in note 6.

ii) Valuation processes

The finance department of the Corporation includes a team that performs the valuations of system assets and land and buildings required for financial reporting purposes. This team reports directly to the Chief Financial Officer. Discussions of valuation processes and results are held between the Chief Financial Officer and the valuation team at least once every year, in line with the Corporation's reporting dates. A comprehensive valuation was last performed as at 30 June 2017, in which the Corporation engaged external, independent and qualified valuers to perform a review of the valuation. A comprehensive valuation is to be performed and reviewed at least every three years. An interim formal revaluation is undertaken where there is an indication that the valuation may differ from carrying value by greater than 20 per cent.

The main level 3 inputs used by the Corporation for the 30 June 2019 valuation were derived and evaluated as follows:

- A discounted cash flow model is used to perform a value in use calculation using inputs such as future cash flows, including revenue, operating expenditure and capital expenditure, and discount rates to determine fair value. The cash flows are discounted using a discount rate which is based upon several inputs, primarily the risk-free rate, market risk premium and debt risk premium. The risk-free rate is observable data based on government bond rates, the market risk premium is determined from analysis of comparable listed corporations and the debt risk premium data is obtained from observable data of corporate bond yields and spreads and is adjusted as required for use in the model.
- The terminal RAB multiple is determined with reference to market observable multiples.

14 Fair value measurements continued

iii) Valuation inputs and relationships to fair value

The following table summarises the quantitative information about the significant unobservable inputs used in level 3 fair value measurements of system assets and land and buildings which had a fair value of $7,984.8M.

Unobservable inputs	Range of inputs (probability weighted average)	Relationship of unobservable inputs to fair value
Discount rate	+/-50 basis points	The higher the discount rate, the lower the fair value. A 50 basis point movement in the discount rate results in a $216.6M change in the fair value.
Five year forecast revenue	+/-10 per cent	The higher the revenue the higher the fair value. A 10 per cent movement in the revenue results in a $413.4M change in the fair value.
Five year forecast operating expenditure	+/-10 per cent	The higher the operating expenditure the lower the fair value. A 10 per cent movement in the operating expenditure results in a $168.2M change in the fair value.
Five year forecast capital expenditure	+/-10 per cent	The higher the capital expenditure the lower the fair value. A 10 per cent movement in the capital expenditure results in an $27.9M change in the fair value.
Forecast terminal RAB multiple	+/-0.05	The higher the terminal RAB multiple, the higher the fair value. A 0.05 movement in terminal RAB multiple results in a $332.3M change in fair value.

c) Disclosed Fair Values

The Corporation also has financial assets and liabilities which are not measured at fair value, but for which fair values are disclosed.

The carrying amounts and fair values of financial assets and liabilities are materially the same other than interest bearing liabilities which are shown below:

		2019		2018	
	Note	Carrying Amount $M	Fair Value $M	Carrying Amount $M	Fair Value $M
Financial liabilities carried at amortised cost					
Interest bearing liabilities	10	**5,552.2**	**6,186.8**	5,383.4	5,766.5

Fair value of borrowings is calculated based on discounted expected future principal and interest cash flows at the current market interest rates that are available to the Corporation for similar financial instruments. The fair value of current borrowings approximates the carrying amount, as the impact of discounting is not significant (level 2).

The carrying amounts of trade receivables and payables are assumed to approximate their fair values due to their short-term nature.

Interest rates used for determining fair value

The Corporation uses the NSW Treasury Corporation (TCorp) yield curve as at 30 June 2019 to discount financial instruments. The interest rates used are in the following ranges:

	2019	2018
Borrowings	1.2%–2.7%	1.9%–3.5%

Other non-financial assets

The carrying amounts of non-financial assets, other than inventories, derivatives and deferred tax assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, the asset's recoverable amount is estimated.

For assets that have an indefinite useful life and intangible assets that are not yet available for use, the recoverable amount is estimated annually irrespective of any indication of impairment. The recoverable amount of an asset or cash generating unit (CGU) is the greater of their fair value less costs to sell and value in use. Refer to note 6 for the method of calculation of the recoverable amount. For an asset that does not generate largely independent cash inflows, the recoverable amount is determined for the CGU to which the asset belongs.

An impairment loss is recognised whenever the carrying amount of an asset or its CGU exceeds its recoverable amount. Impairment losses are recognised in profit or loss, unless an asset has previously been revalued, in which case the impairment loss is recognised as a reversal to the extent of that previous revaluation with any excess recognised through profit or loss.

Impairment losses recognised in respect of a CGU are applied to the carrying amount of the system assets and land and buildings and indefinite life intangible assets of the CGU on a pro rata basis.

An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation and amortisation, if no impairment loss has been recognised for the asset in prior years.

15 Key management personnel disclosure

Key management personnel comprise members of the Board and the Corporation's leadership management team. The shareholding ministers, the New South Wales Treasurer and the Portfolio Minister (Minister for Energy and Environment) are also considered to be key management personal.

Key management personnel remunerations

In addition to their salaries, the Corporation also provides post-employment benefits to directors and executive officers. Post-employment benefits for directors relates to compulsory superannuation contributions.

The shareholding ministers (including the NSW Treasurer) and the Portfolio Minister receive no remuneration from, or on behalf of, the Corporation for their services to the Corporation.

The key management personnel compensation included in employee benefits expense (Note 3(a)) are as follows:

	2019 $M	2018 $M
Short-term employee benefits	**4.5**	4.6
Long-term benefits	**0.2**	0.3
Post-employment benefits	**0.1**	0.1
Termination benefits	**—**	0.8
	4.8	5.8

16 Related party transactions

a) State owned parties

The Corporation is a NSW Government owned corporation, with shares held by the shareholding ministers on behalf of the State of NSW. All State of NSW controlled entities and entities in which the State of NSW has significant influence over are considered to be related parties of the Corporation.

b) Directors and the Corporation's leadership management team

Some directors of Essential Energy are also directors of other companies or have an interest in other companies or entities that may have undertaken transactions with Essential Energy during the year. A Register of Directors' interests is maintained by the Board Secretary and updated as required during the year. In particular, in accordance with the Board Charter and the Corporation's Code of Conduct, directors have declared any potential conflicts of interest in matters discussed at the meetings. The members of the leadership management team are also required to declare any interests including related party transactions. All transactions with directors and the leadership management team and their related parties that occurred during the current year were insignificant and were under normal commercial terms.

c) NSW Premier and NSW Cabinet Ministers

The NSW Premier and the NSW Cabinet Ministers, as well as any companies that they have control or significant influence over, and their close family members are considered to be related parties of the Corporation. Any identified material transactions between the Corporation and these related parties are disclosed. Enquiries are made of the Premier and Cabinet Ministers by NSW Treasury for this purpose.

d) Transactions with related parties

The following related party transactions occurred with state-owned entities or entities over which the State had significant influence:

NSW Treasury

NSW Treasury provides a NSW Government guarantee on the borrowings of the Corporation allowing the Corporation to borrow at lower interest rates. NSW Treasury levies a competitive neutrality fee at a fixed rate on the borrowings for which it has provided the guarantee. This is paid annually in September. The fee relating to the current year was $99.3M (2018: $97.6M).

TCorp

TCorp is a wholly owned NSW State owned corporation and is the central financing agency for the NSW public sector. TCorp provides debt and investments and provides other financial services to the NSW public sector. TCorp has also provided guarantees relating to workers compensation insurance and prudential requirements for the Australian Energy Market Operator (refer note 18). Details of borrowings are disclosed in note 10, interest costs on these borrowings were $235.3M (2018: $241.9M) of which $50.5M (2018: $51.2M) was owing at year end. Borrowing facilities provided by TCorp are disclosed in note 13.

16 Related party transactions continued

Department of Planning Industry and Environment

The NSW Department of Planning Industry and Environment administers the Climate Change Fund. The Corporation is required to contribute a gazetted annual amount to the Department of Planning Industry and Environment for the Climate Change Fund. An expense of $59.2M was recognised for the current year (2018: $60.4M) for the Climate Change Fund contribution, with $nil owing at 30 June 2019 (2018: $nil).

Crown Entity

The Crown Entity of the NSW Government administers the Restart NSW Fund which is funding several infrastructure projects within NSW. The Crown Entity has provided capital and revenue grants to the Corporation during 2019. Assets with a fair value of $61.5M associated with separable portions of the Wentworth to Broken Hill Pipeline and associated electrical infrastructure were granted to the Corporation. From April 2019 the Crown Entity provided the Corporation with funding of the amount of the bulk water supply charge being levied by Water NSW associated with the pipeline which is not recovered through water tariffs. This revenue amounted to $6.2M with $4.1M owing by the Crown entity at 30 June 2019.

Water NSW

Water NSW, an NSW government agency, operates the pipeline providing water from Wentworth to Broken Hill. From April 2019 Water NSW has charged the Corporation for bulk water provided to Broken Hill through the pipeline. A bulk water supply expense of $6.2M was recognised in 2019 which remained owing to Water NSW at 30 June 2019.

Other wholly owned NSW State Owned Corporations

The Corporation has transactions and balances with other NSW State Owned Corporations, as both a supplier and purchaser. These include supply of power and water services, audit services, state taxes, licence fees, levies, rates, grants for capital and other works, and lease rental income and expenses. Other than grants, these transactions and their settlement are on terms and conditions consistent with normal commercial terms and conditions.

Receivables and payables exist at reporting date in respect of some of the above related party transactions. No impairment provision in respect of receivables has been raised in relation to any outstanding balances, and no other expense has been recognised in respect of impaired receivables from related parties. Amounts receivable and amounts payable are unsecured and made on normal commercial terms and conditions.

17 Remuneration of auditor

	2019 $M	2018 $M
Audit Office of New South Wales		
Audit of financial statements	**0.4**	0.4

18 Contingent liabilities

Contingent liabilities

Land Remediation

The Corporation has engaged experts to assess the risk of the existence of contamination on sites. The expert has identified several sites where the risk of existing contamination is high. These sites are being assessed to determine the existence and extent of contamination. The assessment provides the extent of work and the related costs necessary to remediate the sites. A limited number of sites have been assessed to date, with a provision made for estimated remediation costs. The extent of contamination and cost of remediation of the remaining sites cannot yet be reliably estimated.

Tathra Bushfire

A bushfire on 18 March 2018 in the southern region of NSW, within the Corporation's power distribution footprint, resulted in significant property damage. The State Coroner has initiated an enquiry into the cause and origin of the fire. A financial exposure could arise if civil proceedings were initiated against the Corporation. The relevant deductible (excess) applicable under the Corporation's liability insurance policy is $10.0M.

Guarantees	2019 $M	2018 $M
Guarantees provided to regulatory and statutory authorities	**22.2**	23.8

19 Capital commitments

	2019 $M	2018 $M
Commitments for the acquisition of property, plant and equipment contracted for at the reporting date but not recognised as liabilities (including GST)	**52.9**	46.9
GST credits	**4.8**	4.3

20 Operating lease commitments

a) Leases as lessee

The Corporation leases various land and premises under non-cancellable operating leases. The leases have varying terms, escalation clauses and renewal rights. On or prior to renewal, the terms of the leases are renegotiated. The future minimum lease payments under non-cancellable leases are as follows:

	2019 $M	2018 $M
Within twelve months	**6.5**	5.2
Twelve months or longer and not longer than five years	**22.2**	8.9
Longer than five years #	**37.7**	1.7
Total (including GST)	**66.4**	**15.8**
GST credits	**6.0**	**1.4**

The leases greater than 5 years include leases and licence agreements with no fixed term contract which are expected to continue for an indefinite period.

- There are 278 non-cancellable property leases.
- Many of the leases have contingent rentals either based on CPI or some other increment, and renewal options between one and five years.
- Minimum lease payments upon renewal will be based on the market value applying at the time.
- There are no non-cancellable equipment or computer leases.

b) Leases as lessor

The Corporation leases out its properties, including premises, land and communications towers, under operating lease agreements at market rentals, predominantly on a fixed term basis. The future minimum lease payments under non-cancellable leases are as follows:

	2019 $M	2018 $M
Within twelve months	**1.1**	0.8
Twelve months or longer and not longer than five years	**1.6**	0.4
Longer than five years #	**0.1**	0.1
Total (including GST)	**2.8**	1.3
GST debits	**0.3**	0.1

The leases greater than 5 years are mainly leases with no fixed term contract and are expected to continue for an indefinite period.

During the year ended 30 June 2019 $1.2M (2018: $1.0M) was recognised as rental income in profit or loss.

21 Reconciliation of cash flows from operating activities

	2019 $M	2018 $M
Profit/ (loss) for the year	**2.8**	(11.6)
Add/ (less) non-cash items:		
Depreciation, amortisation, impairment and write off of non-financial assets	**438.3**	372.0
Gifted assets and capital grants	**(165.3)**	(72.9)
Non-cash superannuation expenses	**(0.2)**	(0.5)
Net loss on disposal of property, plant and equipment	**3.9**	6.1
Amortisation of deferred interest (income)/ expense	**(1.5)**	13.9
Capitalisation of indexed bonds indexation	**9.8**	10.5
Changes in assets and liabilities:		
(Increase)/ decrease in accrued revenue from unread meters	**4.2**	5.4
(Increase)/ decrease in other receivables	**(3.8)**	11.6
(Increase)/ decrease in inventories	**(8.5)**	(5.9)
Increase/ (decrease) in accrued operating expenditure	**21.4**	(0.4)
Increase/ (decrease) in current tax balances	**28.7**	(0.4)
Increase/ (decrease) in deferred taxes liabilities	**(65.6)**	(35.3)
Increase/ (decrease) in other provisions	**36.1**	(26.8)
Increase/ (decrease) in contract liabilities	**(2.1)**	19.3
Increase/ (decrease) in deferred revenue	**8.1**	(0.7)
Net cash from operating activities	**306.3**	284.3

22 Superannuation – Defined benefit plans

The Corporation has defined benefit superannuation plans covering a significant number of current and past employees, which requires contributions to be made to separately administered funds.

The net obligation in respect of defined benefit plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value, and the fair value of any plan assets is deducted.

The discount rate is the market yields on HQCBs that have maturity dates approximating to the terms of the Corporation's obligations. The calculation is performed by a qualified actuary using the projected unit credit method.

All remeasurements arising from defined benefit plans are recognised in other comprehensive income in the year in which they occur.

Where the calculation results in a benefit to the Corporation, the recognised asset is limited to the net total of any unrecognised actuarial losses and past service costs and the present value of any future refunds from the plan or reductions in future contributions to the plan.

The Corporation has classified the defined benefits schemes wholly as a non-current asset or liability to reflect the appropriate timing of the obligation.

a) Nature of the benefits provided by the funds

In 1997 predecessor entities now forming part of the Corporation contributed to three defined benefits schemes, namely the State Authorities Superannuation Scheme (SASS), the State Authorities Non-Contributory Superannuation Scheme (SANCS) and the State Superannuation Scheme (SSS). On 1 July 1997 the bulk of employees' benefits were transferred from these superannuation schemes to three divisions of the Energy Industries Superannuation Scheme (EISS) as follows:

- SASS – Division B
- SANCS – Division C
- SSS – Division D

The Energy Industries Superannuation Scheme (EISS) is divided into seven divisions, of which Divisions B, C and D provide defined benefits, that is at least a component of the final benefit is derived from a multiple of member salary and years of membership. Members receive lump sum or pension benefits on retirement, death, disablement and withdrawal. Divisions B, C and D are closed to new members except for members of eligible schemes who can transfer their entitlements into the Scheme.

In addition, the Corporation has some employees remaining in defined benefit superannuation plans through SASS, SSS, and SANCS.

The SAS Trustee Corporation (STC) Pooled Fund (the Pooled Fund) holds in trust the investments of the above closed NSW public sector superannuation schemes. These schemes are all defined benefit schemes – at least a component of the final benefit is derived from a multiple of member salary and years of membership. Members receive lump sum or pension benefits on retirement, death, disablement and withdrawal.

The Corporation has determined that separate disclosure of movements in plan assets and obligations and details of plan assets of the defined benefit schemes of SASS, SANCS, and SSS (11 members) will not materially influence the users of the financial statements.

In respect of EISS the disclosures below are prepared in relation to Divisions B, C and D only, these divisions together with the above schemes are referred to collectively as "the Schemes" hereafter.

22 Superannuation – Defined benefit plans continued

b) Description of the regulatory framework

EISS

EISS was established on 30 June 1997 by a Trust Deed made under an Act of the NSW Parliament, to provide retirement benefits for employees of certain Energy Industries bodies in NSW.

EISS is regulated primarily by the *Superannuation Industry (Supervision) Act 1993 (Cth)* ("the SIS legislation") but is also subject to regulation under the *Superannuation Administration Act 1996 (NSW)*.

The SIS legislation governs the superannuation industry and provides the framework within which superannuation plans operate. The SIS Regulations require an actuarial valuation to be performed for each defined benefit superannuation plan every three years, or every year if the plan pays defined benefit pensions, unless an exemption has been obtained.

The prudential regulator, the Australian Prudential Regulation Authority (APRA), licenses and supervises regulated superannuation plans.

EISS has received an exemption from annual actuarial valuation and therefore actuarial valuations are only required triennially. The last actuarial valuation of the Scheme was performed as at 30 June 2018. The next actuarial valuation is due as at 30 June 2021.

SASS, SSS and SANCS

The schemes in the Pooled Fund are established and governed by the following NSW legislation: *Superannuation Act 1916, State Authorities Superannuation Act 1987, Police Regulation (Superannuation) Act 1906, State Authorities Non-Contributory Superannuation Scheme Act 1987*, and their associated regulations.

The schemes in the Pooled Fund are exempt public-sector superannuation schemes under the SIS legislation. The SIS Legislation treats exempt public-sector superannuation funds as complying funds for concessional taxation and superannuation guarantee purposes.

Under a Heads of Government agreement, the New South Wales Government undertakes to ensure that the Pooled Fund will conform with the principles of the Commonwealth's retirement incomes policy relating to preservation, vesting and reporting to members and that members' benefits are adequately protected.

The New South Wales Government prudentially monitors and audits the Pooled Fund and the Trustee Board activities in a manner consistent with the prudential controls of the SIS legislation. These provisions are in addition to other legislative obligations on the Trustee Board and internal processes that monitor the Trustee Board's adherence to the principles of the Commonwealth's retirement incomes policy.

An actuarial investigation of the Pooled Fund is performed every three years. The last actuarial investigation was performed as at 30 June 2018. The next actuarial valuation is due as at 30 June 2021.

c) Risk Exposure

There are several risks to which the Funds expose the Employer. The more significant risks relating to the defined benefits are:

- Investment risk – The risk that investment returns will be lower than assumed and the Employer will need to increase contributions to offset this shortfall.
- Longevity risk – The risk that pensioners live longer than assumed, resulting in pensions being paid for a longer period and thereby requiring additional employer contributions.
- Pension indexation risk – The risk that pensions will increase at a rate greater than assumed, increasing future pensions and thereby requiring additional employer contributions.
- Salary growth risk – The risk that wages or salaries (on which future benefit amounts for active members will be based) will rise more rapidly than assumed, increasing defined benefit amounts and thereby requiring additional employer contributions.
- Legislative risk – The risk is that legislative changes could be made which increase the cost of providing the defined benefits.

The defined benefit fund assets are invested with independent fund managers and have a diversified asset mix. The Funds have no significant concentration of investment risk or liquidity risk.

d) Description of other entities' responsibilities for the governance of the funds

The Schemes' Trustees are responsible for the governance of the Schemes. The Trustees have a legal obligation to act solely in the best interests of the Schemes' beneficiaries. The Trustees have the following roles:

- Administration of the Scheme and payment to the beneficiaries from Scheme assets when required in accordance with the Scheme rules;
- Management and investment of the Scheme assets;
- Compliance with other applicable regulations, and
- Compliance with the Trust Deed.

e) Description of significant events

There were curtailments and settlements during the year due to member exits. Refer to note 22(f) for the impact of these.

f) Net Defined Benefit (Liability)/Asset and reconciliation of movements in balances

The following tables summarise the net asset/ (liability) recognised in the Statement of Financial Position within non-current assets and non-current provisions.

	30 June 2019			30 June 2018		
	Present Value of Obligation $M	Fair Value of Plan Asset* $M	Scheme Surplus/ (deficit) $M	Present Value of Obligation $M	Fair Value of Plan Asset* $M	Scheme Surplus/ (deficit) $M
EISS	**(338.9)**	**292.9**	**(46.0)**	(313.6)	286.6	(27.0)
SASS	**(9.7)**	**10.8***	**1.1**	(8.4)	9.2*	0.8
SANCS	**(0.8)**	**0.0**	**(0.8)**	(0.8)	0.2	(0.6)
SSS	**(2.0)**	**1.8**	**(0.2)**	(1.7)	1.7	—
Total	**(351.4)**	**305.5**	**(45.9)**	(324.5)	297.7	(26.8)

The following tables summarise the components of net benefit expenses recognised in the profit or loss, actuarial gains and losses recognised in other comprehensive income, and funded status and amounts recognised in the Statement of Financial Position.

	2019			2018		
	Total Present Value of Obligation $M	Total Fair Value of Plan Asset $M	Total $M	Total Present Value of Obligation $M	Total Fair Value of Plan Asset $M	Total $M
At 1 July	**(324.5)**	**297.7**	**(26.8)**	(389.4)	317.1	(72.3)
(Expense)/ income recognised in profit or loss						
Current service cost	**(4.1)**	**—**	**(4.1)**	(5.9)	—	(5.9)
Gains/ (losses) arising from curtailments and settlements	**11.0**	**(11.2)**	**(0.2)**	19.5	(16.8)	2.7
Interest (expense)/ income	**(12.7)**	**11.8**	**(0.9)**	(9.6)	7.8	(1.8)
	(5.8)	**0.6**	**(5.2)**	4.0	(9.0)	(5.0)
Income/ (expense) recognised in other comprehensive income						
Remeasurements						
Return on plan assets, excluding amounts included in interest (expense)/ income	**—**	**17.2**	**17.2**	—	9.7	9.7
Gain/ (loss) from change in demographic assumptions	**(0.6)**	**—**	**(0.6)**	(0.3)	—	(0.3)
Gain/ (loss) from change in financial assumptions	**(36.3)**	**—**	**(36.3)**	50.4	—	50.4
Gain/ (loss) from change in liability experience	**(0.9)**	**—**	**(0.9)**	(13.4)	—	(13.4)
	(37.8)	**17.2**	**(20.6)**	36.7	9.7	46.4
Adjustment for effect of asset ceiling*	**—**	**1.3**	**1.3**	—	(1.4)	(1.4)
	(37.8)	**18.5**	**(19.3)**	36.7	8.3	45.0
Contributions by Fund participants						
Employers	**—**	**5.4**	**5.4**	—	5.5	5.5
Plan participants	**(2.2)**	**2.2**	**—**	(2.5)	2.5	—
	(2.2)	**7.6**	**5.4**	(2.5)	8.0	5.5
Benefits paid	**17.3**	**(17.3)**	**—**	25.0	(25.0)	—
Taxes, premiums and expenses paid	**1.6**	**(1.6)**	**—**	1.7	(1.7)	—
At 30 June	**(351.4)**	**305.5**	**(45.9)**	(324.5)	297.7	(26.8)

* The asset ceiling is the present value of any economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan or other plans. The adjustment for the effect of asset ceiling has been determined based on the change in the maximum economic benefit available to the Corporation in the form of reductions in future employer contributions.

22 Superannuation – Defined benefit plans continued

g) Fair Value of Fund assets

All EISS Division B, C and D assets are held in Pool B of the Scheme, Pool B in turn holds units invested in the Energy Investment Fund, a pooled superannuation trust. As such, assets are not separately invested for each employer and it is not possible or appropriate to disaggregate and attribute fund assets to individual entities, and the disclosures below relate to total assets of Pool B of the Scheme. The investment in the Energy Investment Fund is valued using significant observable inputs (Level 2) and amounted to $2,005.6M (2018: $1,950.5M) at reporting date. Some EISS Pool B assets are invested in accordance with member investment choices. Pool B assets invested in the Energy Investment Fund but not subject to member investment choice are included in the table below. The percentage invested in each asset class at the reporting date is:

As At	30 June 2019	30 June 2018
Australian listed equities	**16.0%**	17.6%
Overseas listed equities	**24.0%**	28.1%
Property	**12.0%**	7.8%
Private equity	**2.0%**	1.0%
Infrastructure	**6.0%**	6.7%
Alternatives	**4.0%**	5.4%
Fixed income	**31.0%**	28.0%
Cash and short-term securities	**5.0%**	5.4%
Total	**100.0%**	100.0%

The trustees invest all scheme assets at arm's length through independent fund managers.

For EISS derivatives can be used by investment managers, however strict investment guidelines detail all limits approved on the use of derivatives. The use of derivatives is governed by the investment policies, which permit the use of derivatives to change the Fund's exposure to particular assets. The Trustee requires derivative financial instruments are not entered into for speculative purposes or to gear the Fund, and that all derivatives positions are (a) fully cash covered; (b) are offset to existing assets; or (c) are used to alter the exposures in underlying asset classes. Compliance with policies and exposure limits are reviewed by the Trustee on a continual basis. As such the investment managers make limited use of derivatives.

h) Fair Value of the Corporation's own financial instruments

The fair value of Plan assets includes no amounts relating to:

- any of the Corporation's own financial instruments
- any property occupied by, or other assets used by, the Corporation.

i) Significant Actuarial Assumptions at the Reporting Date

	2019	2018
Expected salary increase rate (excluding promotional increases)	**2.5% per annum**	1 per cent until 30 June 2019 and 2.5 per cent pa thereafter
Rate of CPI increase	**1.75 per cent pa to 30 June 2020, 2.0 per cent pa to 30 June 2021, 2.2 per cent pa to 30 June 2023, then 2.5 per cent pa thereafter.**	2.5 per cent pa
Discount rate	**2.9 per cent pa**	4.1 per cent pa
Pensioner mortality	**The pensioner mortality rates used are as per the triennial valuation of the scheme as at 30 June 2018**	The pensioner mortality rates used are as per the triennial valuation of the scheme as at 30 June 2015

j) Sensitivity Analysis

The Corporation's total defined benefit obligation as at 30 June 2019 under several scenarios is presented below.

Scenarios A to F relate to sensitivity of the total defined benefit obligation to economic assumptions, and scenarios G and H relate to sensitivity to demographic assumptions.

	Base Case	Scenario A -1.0 per cent discount rate	Scenario B +1.0 per cent discount rate
Discount rate	2.9%	1.9%	3.9%
Rate of CPI increase	1.75% pa for 2018/19 and 2019/20, 2.0% for 2020/21, 2.25% pa for 2021/22 and 2022/23 then 2.5% pa thereafter	1.75% pa for 2018/19 and 2019/20, 2.0% for 2020/21, 2.25% pa for 2021/22 and 2022/23 then 2.5% pa thereafter	1.75% pa for 2018/19 and 2019/20, 2.0% for 2020/21, 2.25% pa for 2021/22 and 2022/23 then 2.5% pa thereafter
Salary inflation rate	2.5% pa	2.5% pa	2.5% pa
Defined benefit obligation ($M)	351.4	388.1	320.6

	Base Case	Scenario C +0.5% rate of CPI increase	Scenario D -0.5% rate of CPI increase
Discount rate	2.9%	2.9%	2.9%
Rate of CPI increase	1.75% pa for 2018/19 and 2019/20, 2.0% for 2020/21, 2.25% pa for 2021/22 and 2022/23 then 2.5% pa thereafter	2.25% pa for 2018/19 and 2019/20, 2.50% for 2020/21, 2.75% pa for 2021/22 and 2022/23 then 3.0% pa thereafter	1.25% pa for 2018/19 and 2019/20, 1.5% for 2020/21, 1.75% pa for 2021/22 and 2022/23 then 2.0% pa thereafter
Salary inflation rate	2.5% pa	2.5% pa	2.5% pa
Defined benefit obligation ($M)	351.4	361.0	342.5

	Base Case	Scenario E +0.5% salary increase rate	Scenario F -0.5% salary increase rate
Discount rate	2.9%	2.9%	2.9%
Rate of CPI increase	1.75% pa for 2018/19 and 2019/20, 2.0% for 2020/21, 2.25% pa for 2021/22 and 2022/23 then 2.5% pa thereafter	1.75% pa for 2018/19 and 2019/20, 2.0% for 2020/21, 2.25% pa for 2021/22 and 2022/23 then 2.5% pa thereafter	1.75% pa for 2018/19 and 2019/20, 2.0% for 2020/21, 2.25% pa for 2021/22 and 2022/23 then 2.5% pa thereafter
Salary inflation rate	2.5% pa	3.0% pa	2.0% pa
Defined benefit obligation ($M)	351.4	360.1	343.1

	Base Case	Scenario G +5% pensioner mortality rates	Scenario H -5% pensioner mortality rates
Defined benefit obligation ($M)	351.4	354.7	349.4

The defined benefit obligation has been recalculated by changing the assumptions as outlined above, whilst retaining all other assumptions.

22 Superannuation – Defined benefit plans continued

k) Asset-Liability matching strategies

For EISS the assets of the Scheme are managed using a Liability Driven Investment approach.

In respect of the STC Pooled Fund the Trustee monitors its asset-liability risk continuously in setting its investment strategy. It also monitors cashflows to manage liquidity requirements. No explicit asset-liability matching strategy is used by the Trustee.

l) Funding arrangements

Funding arrangements are reviewed at least every three years following the release of the triennial actuarial review and was last reviewed following completion of the triennial review as at 30 June 2018. Contribution rates are set after discussions between the employer and the trustee. In the case of the STC Pooled Fund, NSW Treasury is consulted.

Funding positions are reviewed annually, and funding arrangements may be adjusted as required after each annual review.

Surplus / deficit

The following is a summary of the 30 June 2019 financial position of the Fund calculated in accordance with AASB 1056 "Superannuation Entities":

	EISS		Other		Total	
	2019 $M	2018 $M	2019 $M	2018 $M	2019 $M	2018 $M
Accrued benefits	**278.6**	283.9	**9.1**	8.6	**287.7**	292.5
Net market value of Fund assets	**(292.8)**	(286.6)	**(14.2)**	(13.8)	**(307.0)**	(300.4)
Net surplus	**(14.2)**	(2.7)	**(5.1)**	(5.2)	**(19.3)**	(7.9)

Contribution recommendations

Recommended contribution rates for the Corporation to the main scheme (EISS) are:

Division B multiple of member contributions	Division C per cent member salary	Division D multiple of member contributions	Additional Lump Sum $M per annum
1.9	2.5%	1.64	nil

Recommended contribution rates for the Corporation to the Pooled Fund are $nil.

m) Significant Actuarial Assumptions at the reporting date

The economic assumptions adopted for the AASB 1056 financial position calculations are:

Weighted-Average Assumptions	EISS	Other
Expected rate of return on Fund assets backing current pension liabilities	5.5% pa	7.4% pa
Expected rate of return on Fund assets backing other liabilities	5.5% pa	6.4% pa
Expected salary increase rate	2.6% pa for 2019/20, 2.8% pa for 2020/21, 3.3% thereafter	3.2% pa
Expected rate of CPI increase	2.3% pa	2.2% pa

The above economic assumptions are to be adopted for the 30 June 2019 actuarial investigation.

Expected contributions	Financial Year to 30 June 2020 $M
Expected employer contributions	
– EISS	4.6
– Other	—

Maturity profile of defined benefit obligation

The weighted average duration of the defined benefit obligation is 11 years (2018: 11.8 years) for the EISS, while it is 11.7 years (2018: 12.3 years) for the Pooled fund.

n) Nature of asset/liability

If a surplus exists in the employer's interest in the Fund, the employer may be able to take advantage of it in the form of a reduction in the required contribution rate, depending on the advice of the Fund's actuary.

Where a deficiency exists, the employer is responsible for any difference between the employer's share of Fund assets and the defined benefit obligation.

23 Events subsequent to reporting date

The financial statements of the Corporation for the year ended 30 June 2019 were authorised for issue in accordance with a resolution of the Board on 10 September 2019.

There are no known events that would impact on the state of affairs of the Corporation or have a material impact on these statements up to that date.

END OF AUDITED FINANCIAL STATEMENTS

Appendices

Disclosure of approved exemptions

Exemptions have been granted by the Treasurer under Section 41BA of the *Public Finance and Audit Act 1983* (PFandAA) so that the financial reporting requirements which apply are broadly consistent with the Corporations Act reporting requirements given that the entity is competing in the National Electricity Market.

The following specific disclosures are not required to be made as a result of the exemptions:

- Budgets s.7 (1)(a)(iii) ARSBA ch. 7 ARSBR
- Report of Operations s.7 (1)(a)(iv) ARSBA
- Management and Activities Schedule 1 ARSBR
- Research and Development Schedule 1 ARSBR
- Human Resources Schedule 1 ARSBR
- Consultants [1] Schedule 1 ARSBR
- Land Disposal Schedule 1 ARSBR
- Consumer Response Schedule 1 ARSBR
- Payment of Accounts Schedule 1 ARSBR
- Time for Payment of Accounts Schedule 1 ARSBR
- Report on Risk Management and Insurance Activities Schedule 1 ARSBR
- Disclosure of Controlled Entities Schedule 1 ARSBR
- Investment Management Performance ch. 10 ARSBR
- Liability Management Performance ch. 11 ARSBR.

1) Consultancy costs of $22.6M were incurred. The majority of consultancy costs were related to business structure and strategy development, AER ring-fencing implementation, customer and stakeholder engagement, support for regulatory activities, Enterprise Reporting System strategy work and assistance with shaping our transformation program of work.

Summary of overseas travel FY2018–19

Purpose of travel	Names of employees	Organisation visited	Cities	Country	Date of departure from Australia	Date of arrival into Australia
Meetings with insurers 2018–19 policy renewals	Luke Jenner, David Chinn	Antares Underwriting Asia, Starr International Insurance (Singapore), AON Global Risk Consulting, AM Trust at Lloyds, AON Commercial Risk Solutions, Berkley Offshore, QBE Europe + various other insurance companies	Singapore, London	Singapore, United Kingdom	5/07/2018	18/07/2018
Attend Institute for Strategic Leadership Course	Luke Jenner	Institute for Strategic Leadership	Queenstown	New Zealand	28/07/2018	6/08/2018
Meeting with Connectics to discuss potential employee relief deployment opportunities	Luke Jenner	Connectics	Christchurch	New Zealand	28/07/2018	6/08/2018

Purpose of travel	Names of employees	Organisation visited	Cities	Country	Date of departure from Australia	Date of arrival into Australia
Attend Oracle Open World Conference – software development in scheduling / ERP opportunities. Meetings with Oracle Utilities and AEP.	Brendon Neyland	Oracle and American Electric Power, Click Software Conference. Extended for a private personal vacation	Miami, San Francisco, Columbus	USA	19/10/2018	8/11/2018
Attend Click Software Customer Conference	Daniel McShane	Click Software Customer Conference	Miami	USA	19/10/2018	26/10/2018
Attend Oracle Open World Conference – software development in scheduling / ERP opportunities. Meetings with Oracle Utilities and AEP.	David Salisbury	Oracle and American Electric Power	San Francisco, Columbus	USA	24/10/2018	1/11/2018
Attend Oracle Open World Conference – software development in scheduling / ERP opportunities. Meetings with Oracle Utilities and AEP.	Justin Hillier, Robert Bridge	Oracle and American Electric Power	San Francisco	USA	20/10/2018	27/10/2018
Attend Institute for Strategic Leadership Course	Bryce Dyer	Institute for Strategic Leadership	Queenstown	New Zealand	8/11/2018	18/11/2018
Inspection and audit of factory for new supplier selected for the supply of 66kV Gas Insulated Switchgear.	Damian Dobaczewski, Mark Garrett, Jason Bridle	Qingdao TGOOD Electric Co., Ltd.	Jiaozhou, Qingdao	China	24/02/2019	2/03/2019
Attend Institute for Strategic Leadership Course	David Salisbury	Institute for Strategic Leadership	Queenstown	New Zealand	9/03/2019	17/03/2019
Global Summit, Hawthorn Club	Chantelle Bramley	Hawthorn Club	New York, Los Angeles	USA	24/03/2019	31/03/2019
Attend 2019 CAMPUT conference	Natalie Lindsay	Canada's Energy and Utility Regulators organisation	Calgary	Canada	3/05/2019	14/05/2019
Meetings with insurers 2019–20 policy renewals	Luke Jenner, David Chinn, Cory Urquhart	Antares Underwriting Asia, Starr International Insurance (Singapore), AON Global Risk Consulting, AIG Europe, Navigators Syndicate, Allied World, Royal and Sun Alliance, Argo Syndicate, Ascot Syndicate, Berkley Offshore, QBE Europe, Tokio Marine Kiln, CNA Hardy Syndicate, Apollo Syndicate, AM Trust at Lloyds, Probitas Syndicate Newline Syndicate, Generali, Travellers, Macquarie Insurance Facility, Aon Commercial Risk Solutions	Singapore, London	Singapore, United Kingdom	13/06/2019	26/06/2019

Government Information (Public Access) Act 2009

The *Government Information (Public Access) Act 2009* (NSW) (GIPA Act) replaced the *Freedom of Information Act 1989* (NSW) on 1 July 2010. The GIPA Act has established a comprehensive system for public access to government information. Essential Energy is subject to the requirements of the GIPA Act and is committed to complying with the Act in a fair and objective manner when dealing with external requests for access to company information. The business supports the proactive release of information where it is in the public interest to do so.

Review of program for release of information

During FY2018–19, Essential Energy's review of its program for release of information, undertaken as per section 7(3) of the GIPA Act, included updates made to Essential Energy's GIPA Application form to comply with amendments to the GIPA Act that came into effect in November 2018. The review also included: a review of the adequacy/currency of its policies, procedures, forms and templates regarding processing requests for access to government information; the training of staff in GIPA Act compliance; and publication of contractual information, and other business information on the Essential Energy website.

Total number of access applications received during the year

In FY2018–19 Essential Energy received 12 formal access applications for information pursuant to the GIPA Act.

The formal applications received were from members of the public, private sector businesses, and lawyers. In response to the formal access applications that were received in FY2018–19, 10 applications were finalised in FY2018–19, and two applications were in progress at 30 June 2019. Of the 10 finalised applications, full access was provided on seven occasions. With respect to the remaining three access applications, one was granted in part, one was refused on privacy grounds, and in one instance the information requested was not held by Essential Energy.

A variety of public interest considerations were taken into account in dealing with these applications. These are set out in Table E.

In the course of determining access applications during the financial year, Essential Energy did not rely on conclusive presumptions of overriding public interest against disclosure (as set out in schedule 1 of the GIPA Act) on any occasion.

Statistical information about access applications

As required by section 8 and schedule 2 of the *Government Information (Public Access) Regulation 2018* (NSW), the following tables provide a summary of the responses to requests made pursuant to the GIPA Act in FY2018–19.

Table A: Number of applications by type of applicant and outcome

	Access granted in full	Access granted in part	Access refused in full	Information not held	Information already available	Refuse to deal with application	Refuse to confirm/deny whether information is held	Application withdrawn
Media	0	0	0	0	0	0	0	0
Members of Parliament	0	0	0	0	0	0	0	0
Private sector business	0	0	0	0	0	0	0	0
Not for profit organisations or community groups	0	0	0	0	0	0	0	0
Members of the public (application by legal representative)	3	1	1	1	0	0	0	0
Members of the public (other)	4	0	0	0	0	0	0	0

* More than one decision can be made in respect of a particular access application. If so, a recording must be made in relation to each such decision. This also applies to Table B.

Table B: Number of applications by type of applicant and outcome

	Access granted in full	Access granted in part	Access refused in full	Information not held	Information already available	Refuse to deal with application	Refuse to confirm/deny whether information is held	Application withdrawn
Personal information applications*	2	0	0	0	0	0	0	0
Access applications (other than personal information applications)	5	1	1	1	0	0	0	0
Access applications that are partly personal information applications and partly other	0	0	0	0	0	0	0	0

* A personal information application is an access application for personal information (as defined in clause 4 of Schedule 4 to the Act) about the applicant (the applicant being an individual).

Table C: Invalid applications

Reason for invalidity	Number of applications
Application does not comply with formal requirements (section 41 of the Act)	0
Application is for excluded information of the agency (section 43 of the Act)	0
Application contravenes restraint order (section 110 of the Act)	0
Total number of invalid applications received	0
Invalid applications that subsequently became valid applications	0

Table D: Conclusive presumption of overriding public interest against disclosure: Matters listed in schedule 1 of the Act

	Number of times consideration used*
Overriding secrecy laws	0
Cabinet information	0
Executive Council information	0
Contempt	0
Legal professional privilege	0
Excluded information	0
Documents affecting law enforcement and public safety	0
Transport safety	0
Adoption	0
Care and protection of children	0
Ministerial code of conduct	0
Aboriginal and environmental heritage	0
Information about complaints to Judicial Commission	0
Information about authorised transactions under Electricity Network Assets (Authorised Transactions) Act 2015	0
Information about authorised transaction under Land and Property Information NSW (Authorised Transaction) Act 2016	0

* More than one public interest consideration may apply in relation to a particular access application and, if so, each such consideration is to be recorded (but only once per application). This also applies in relation to Table E.

Table E: Other public interest considerations against disclosure matters listed in table to Section 14 of the Act

	Number of occassions when application not successful *
Responsible and effective government	0
Law enforcement and security	1
Individual rights, judicial processes and natural justice	1
Business interests of agencies and other persons	0
Environment, culture, economy and general matters	0
Secrecy provisions	0
Exempt documents under interstate Freedom of Information legislation	0

* Includes applications where access is granted in part or refused in full.

Table F: Timelines

	Number of applications
Decided within the statutory timeframe (20 days plus any extensions)	10
Decided after 35 days (by agreement with applicant)	0
Not decided within time (deemed refusal)	0
Total	10

Table G: Number of applications reviewed under Part 5 of the Act (by type of review and outcome)

	Decision varied	Decision upheld	Total
Internal review	0	0	0
Review by Information Commissioner *	0	0	0
Internal review following recommendation under section 93 of Act	0	0	0
Review by NSW Civil and Administrative Tribunal (NCAT)	0	0	0
Total	0	0	0

* The Information Commissioner does not have the authority to vary decisions but can make recommendation to the original decision-maker. The data in this case indicates that a recommendation to vary or uphold the original decision has been made.

Table H: Applications for review under Part 5 of the Act (by type of applicant)

	Number of applications for review
Applications by access applicants	0
Applications by persons to whom information the subject of access application relates (see section 54 of the Act)	0

Table I: Applications transferred to other agencies under Division 2 or Part 4 of the Act (by type of transfer)

	Number of applicants transferred
Agency-initiated transfers	0
Applicant-initiated transfers	0

Summary of the substantial legislative changes for 1 July 2018 to 30 June 2019

Material changes to Commonwealth legislation

Modern Slavery Act 2018 (Cth)

The *Modern Slavery Act* came into effect on 1 January 2019. The Act introduces a new statutory reporting obligation for large businesses and other entities in Australia (with consolidated revenue of at least $100 million per financial year). This obligation requires public reporting on actions that subject entities have taken to address modern slavery risks in their operations and supply chains.

For Australian corporations, the first reporting year will be 1 July 2019–30 June 2020 with reports due by 31 December 2020.

Treasury Laws Amendment (Enhancing Whistleblower Protections) Act 2019 (Cth)

Amendments to Australia's whistleblower laws in the *Corporations Act 2001* (Cth) (Corporations Act) and the *Taxation Administration Act 1953* (Cth) (TAA) were passed by Parliament on 19 February 2019. The reforms provide for a consolidated and expanded whistleblower protection regime, applying to "regulated entities" in the corporate, financial and credit sectors. The reforms also create a new tax affairs whistleblowing scheme.

The changes to both the Corporations Act and the TAA came into effect on 1 July 2019.

Material changes to New South wales Legislation

Gas and Electricity Consumer Safety Act 2017 (NSW)

The *Gas and Electricity (Consumer Safety) Act 2017* and supporting Gas and Electricity (Consumer Safety) Regulation 2018 commenced on 1 September 2018.

The legislation was developed to consolidate the previous separate electricity and gas laws to provide a more streamlined and consistent approach to the regulation of the consumer safety aspects of both energy sources.

The Act provides minimum consumer safety standards, outlines requirements for equipment and installations and supports a robust compliance and enforcement regime.

Material changes to Queensland legislation

There were no pertinent material changes to Queensland legislation during the financial year.

National Electricity Rules and National Energy Retail Rules

The *National Electricity Rules* (NER) apply in New South Wales under the *National Electricity (New South Wales) Act 1997* (NSW), and the *National Energy Retail Rules* (NERR) apply under the *National Energy Retail Law (Adoption) Act 2012* (NSW).

National Energy Retail Law (Adoption) Regulation 2013 (NSW)

The *National Energy Retail (Adoption) Amendment Regulation 2019* came into effect on 1 June 2019. It modifies the application of the NERR in New South Wales to prohibit energy retailers from charging certain vulnerable customers for the de-energisation or re-energisation of the customer's premises.

The Australian Energy Market Commission (AEMC) made several key rule changes and rule change proposals in the last year:

a) Register of distributed energy resources – effective 1 December 2019

   On 13 September 2018, the AEMC made a final rule requiring the Australian Energy Market Operator (AEMO) to establish, maintain and update a register of static data for distributed energy resources (DER) in the national electricity market, including small scale battery storage systems and solar.

   The rule change requires network service providers to request specific DER generation information from their customers and provide this to the AEMO.

   It also requires that the AEMO share disaggregated data regarding the locational and technical characteristics of devices in the DER register with network businesses, in relation to their network areas.

b) Application period for contingent project revenue – effective 2 May 2019

   On 26 April 2019, the AEMC made a final rule to bring AER consideration and approval of contingent projects forward so that network businesses can speed up their investments in time-critical projects.

   Contingent projects are major network infrastructure asset which have been pencilled into long-term investment plans. When a network business has met the requirements to request cost recovery from consumers for one of these projects, it submits a contingent project application to the AER.

   The final rule removed the existing restriction in the NER that prevented network businesses from submitting a contingent project application to the AER in the 90 business days before the end of a regulatory year, except for the second last year of a regulatory control period.

AER Determinations

The Australian Energy Regulator (AER) also made several key decisions in the last year:

a) Review of the cost thresholds for the regulatory investment test for distribution – effective 1 January 2019

In November 2018, the AER published its final decision on the 2018 costs threshold review for the regulatory investment test for distribution (RIT-D). The RIT-D is a cost benefit analysis that network businesses must perform and consult on major investments in their networks.

The review was conducted in accordance with the NER which require the AER to undertake a review every three years of the cost thresholds associated with the RIT-D to ascertain whether they need to be changed to reflect changes in input costs to maintain their appropriateness.

The final decision states that if the estimated capital cost of the investment option:

- exceeds $6 million, the RIT-D applies
- falls below $11 million, a RIT-D proponent can skip the 'draft project assessment report' consultation step
- falls below $22 million, a RIT-D proponent can include its 'final project assessment report' as part of its 'distribution annual planning report.

b) Forecasting productivity growth for electricity distributors – effective April 2019

In March 2019, the AER released a final decision paper on its approach to forecasting operating expenditure productivity growth for electricity distributors.

In its final decision, the AER determines that a prudent electricity distributor, acting efficiently, can achieve opex productivity growth of 0.5 per cent each year. The AER indicated that it intended to use this productivity growth forecast in its next regulatory determination for each electricity distributor.

c) Final revenue determination for Essential Energy for 2019–2024 – effective 1 July 2019

On 30 April 2019, the AER published its final decision on the electricity determination for Essential Energy for the 2019–2024 regulatory control period.

The final decision allows Essential Energy to recover $5,079.3 million in revenue from its customers over five years, from 1 July 2019 to 30 June 2024

The AER anticipates that the average annual electricity bill for a residential or small business customer on Essential Energy's network will be around 1.2 per cent higher by 30 June 2024, compared to the 2018–2019 level (holding all other components of the bill constant).

In its final decision, the AER noted that Essential Energy had set a high watermark level for its approach to consumer engagement.

AER Guidelines

a) AER *Regulatory Investment Test for Distribution Application Guideline*

In December 2018, the AER published an updated version of the Regulatory Investment Test for Distribution Application Guideline (RIT-D Guideline), made under the National Electricity Rules.

The regulatory investment test for distribution is a cost benefit analysis that network businesses must perform and consult on before major investments in their networks.

Amendments to the RIT-D Guideline were made to improve guidance for applying the regulatory investment tests under the current regulatory framework.

b) AER *Life Support Registration Guide*

In December 2017, the AEMC published a final rule to strengthen protections for customers that have a person requiring life support equipment residing at their premises. These changes came into effect on 1 February 2019.

In January 2019, the AER published the Life Support Registration Guide (Guide) to assist retailers and distributors understand their responsibilities to customers relying on life support equipment under the new rules.

The Guide covers the registration and deregistration of life support customers, the obligation to share information and the obligation to keep and maintain a register and record of life support requirements.

ACCC Inquiry into retail electricity prices

On 11 July 2019, the Australian Competition and Consumer Commission (ACCC) released its final report into retail electricity pricing. The ACCC's inquiry concerns the supply of retail electricity and pricing competitiveness.

While the inquiry was directed at retail markets, the ACCC's recommendations span the entire supply chain.

The ACCC's final report finds that there is a serious electricity affordability problem for consumers and businesses. The report sets out 56 recommendations to reset the National Electricity Market, boosting competition, reducing costs and improving consumer and business outcomes.

The final report states that in FY2017–18, the largest component of the residential bill across the NEM was the network costs and makes recommendations for potentially addressing its significance.

Summary of significant judicial decisions, new codes of practice, and compliance exemptions

There were no pertinent judicial decisions during the financial year.

Index

Index – continued

Glossary

AER	Australian Energy Regulator
ASP	Accredited Service Provider
Capex	Capital expenditure
EBIT	Earnings before interest and tax
EBITDA	Earnings before interest, tax, depreciation and amortisation
IPART	Independent Pricing and Regulatory Tribunal
LTIFR	Lost Time Injury Frequency Rate – calculated as the number of lost time injuries per million hours worked
NECF	National Energy Customer Framework
HPIFR	High Potential Injury Frequency Rate – the frequency of all safety incidents that had the potential to be a fatality or permanently disabling injury within the Network Fatal Risk classifications (excludes near misses)
Opex	Operating expenditure
SAIDI	System Average Incident Duration Index – average total minutes a customer is without power in a year
SAIFI	System Average Interruption Frequency Index – average number of power interruptions per customer for the year
SCFR	Serious Claim Frequency Rate – number of accepted workers compensation claims, for an incapacity, that results in a total absence from work of one work week or more (i.e. 40 hrs) per million hours worked
STPIS	Service Target Performance Incentive Scheme – designed by the AER to incentivise distributors to invest in reliability and customer service
TRIFR	Total Recordable Injury Frequency Rate – calculated as the number of recordable injuries per million hours worked

Contacts

TELEPHONE	Network general enquiries 13 23 91 Supply interruptions 13 20 80 Available 24 hours a day, seven days a week. Interpreter service 13 14 50 Available 24 hours a day, seven days a week. Right to Information Officer (FOI) 13 23 91
WEBSITES	essentialenergy.com.au essentialwater.com.au
ESSENTIAL ENGAGEMENT	engage.essentialenergy.com.au
MAIL	PO Box 5730 Port Macquarie NSW 2444
FOR COPIES OF THE REPORT	Visit essentialenergy.com.au, or call 13 23 91
SOCIAL MEDIA	Follow us on Facebook, YouTube, Twitter and LinkedIn